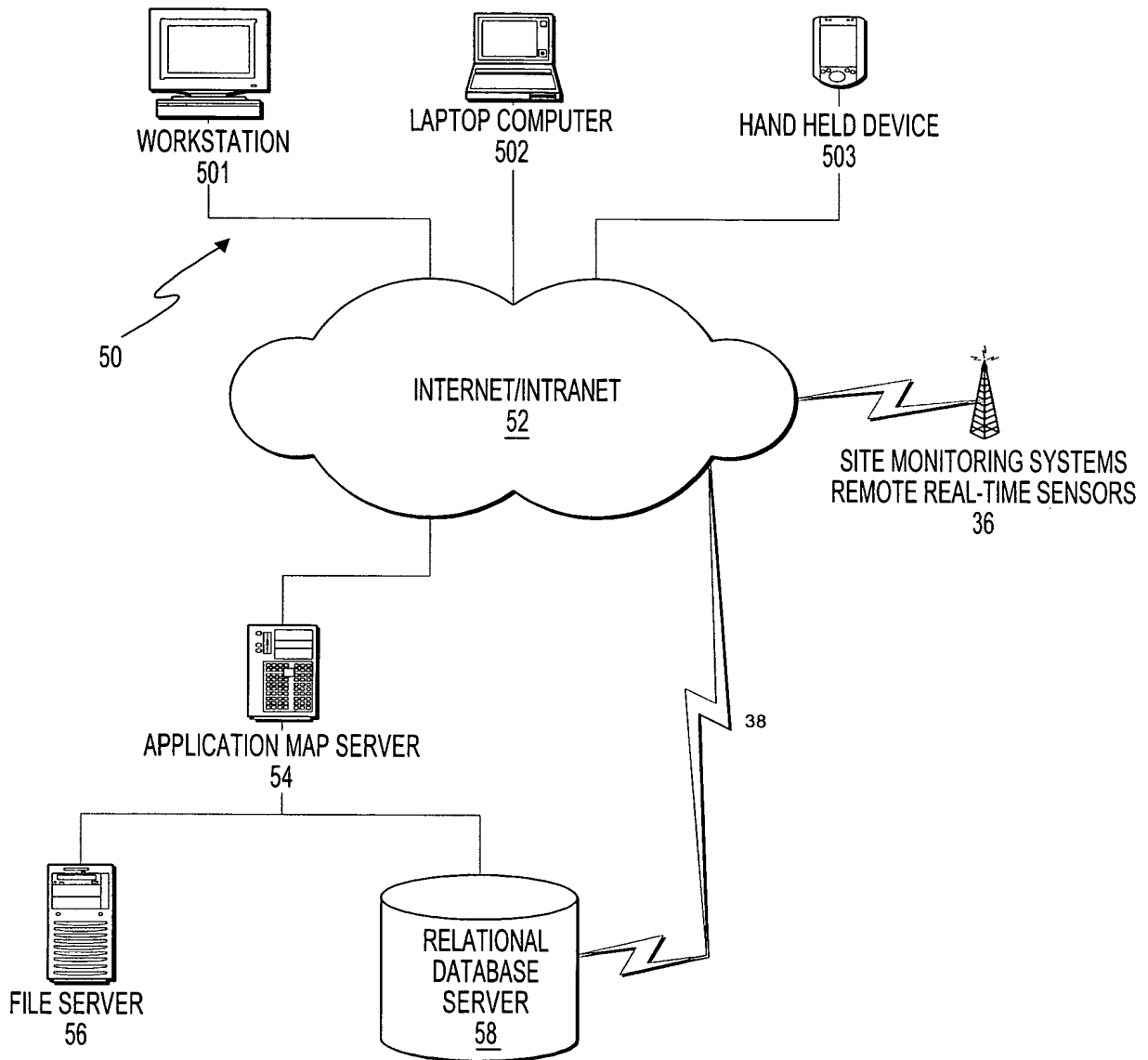


**FIG. 1**



**FIG. 2**

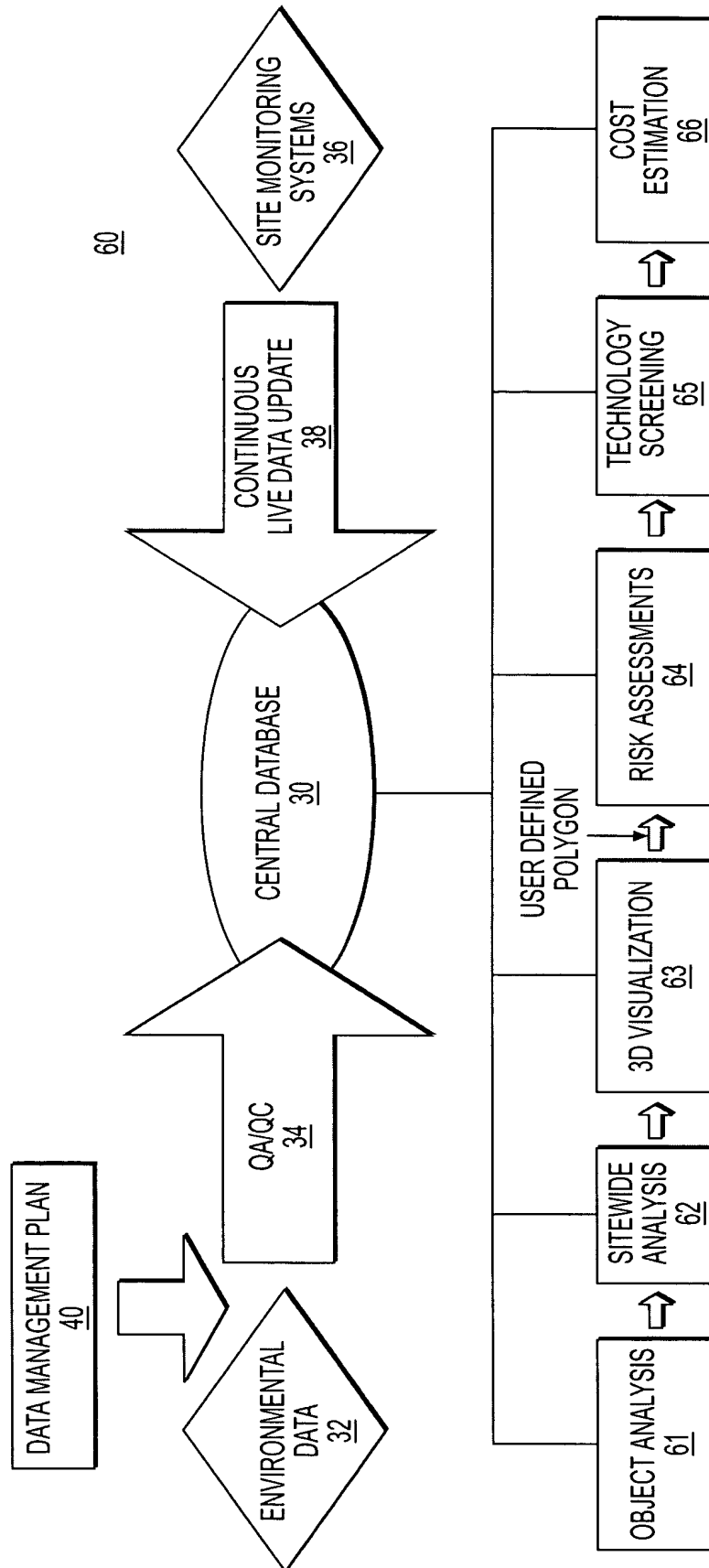
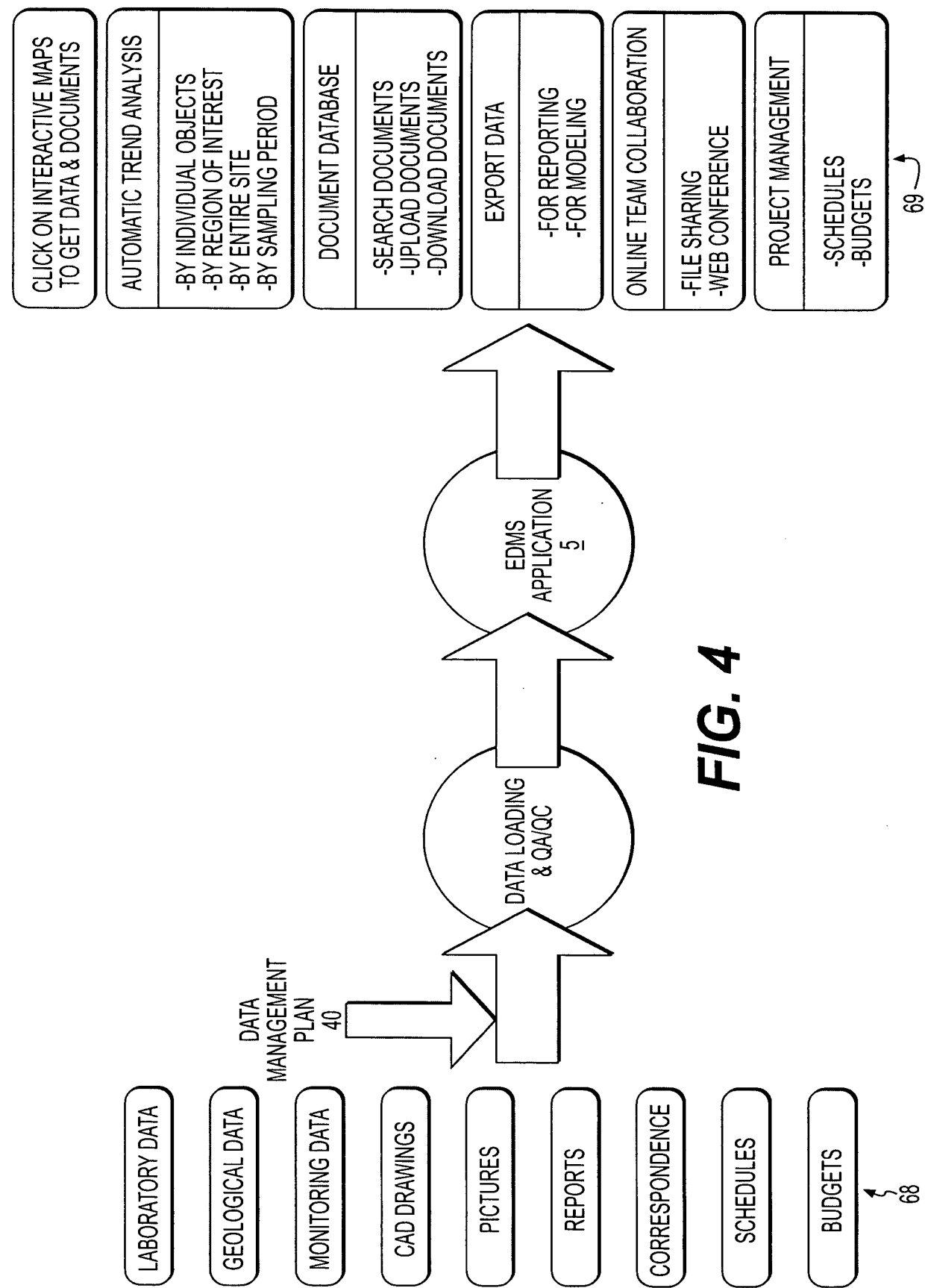


FIG. 3



Inventor(s): Michael Y. YOUNG, et al.

Contact Name: Sean S. Wooden (202) 662-2700

Attorney Docket No.: 151877

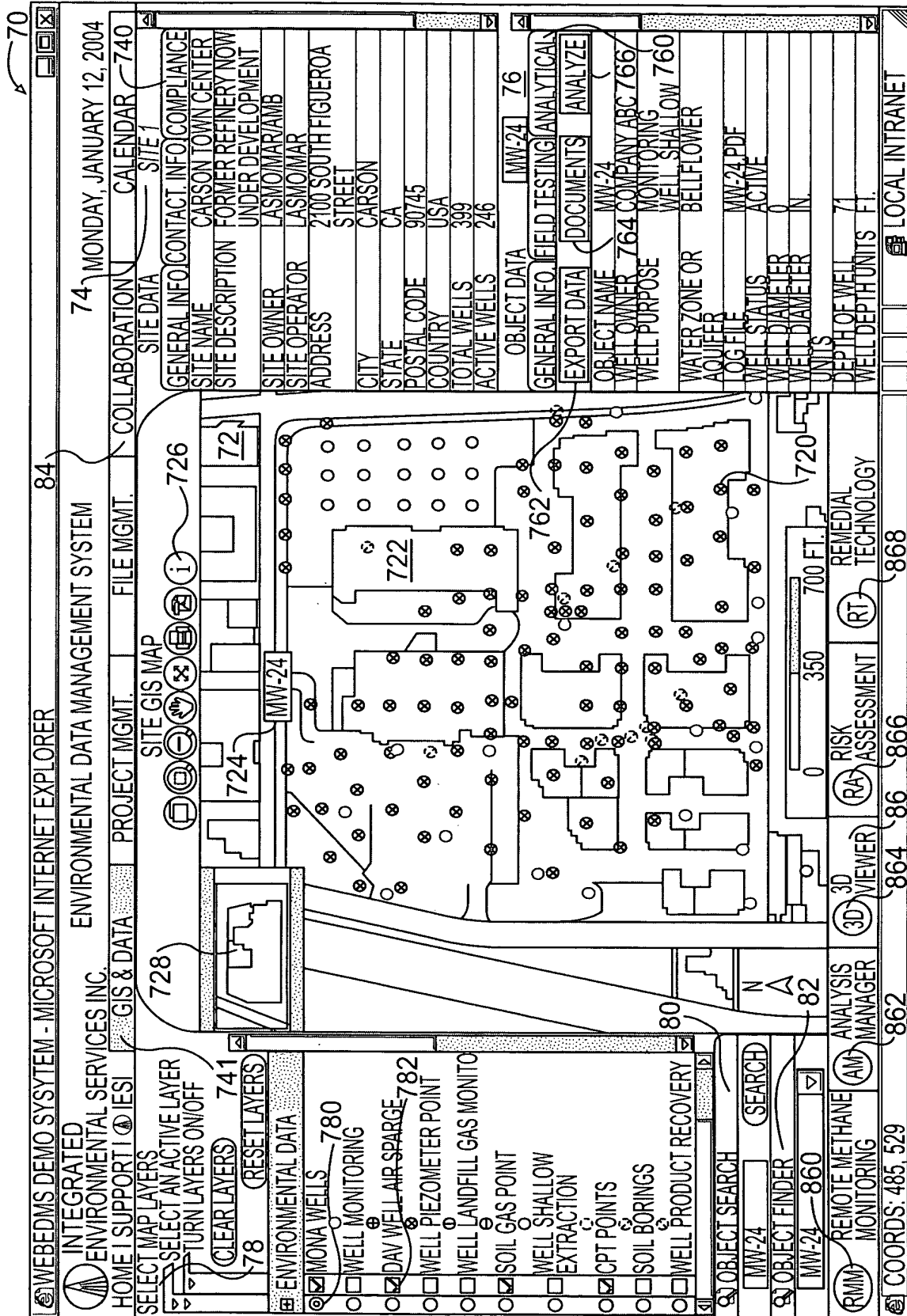


FIG. 5a

Inventor(s): Michael Y. YOUNG, et al.

Contact Name: Sean S. Wooden (202) 662-2700

Attorney Docket No.: 151877

90

WEBEDMS SYSTEM - MICROSOFT INTERNET EXPLORER

106 CONCENTRATION VS. TIME COMPARE TO STANDARD  
OBJECT NAME: MW-24

CONCENTRATION (UNITS) ug/L

22  
20  
18  
16  
14  
12  
10  
8  
6  
4  
2  
0

2/24/1995 3/18/1996 8/28/1996 3/31/1997 8/14/1997 3/6/1998 2/25/1999 11/25/1999

CHEMICAL NAME--BENZENE  
STANDARD VALUE 1 ug/L

108

STANDARD  
BELOW STANDARD  
ABOVE STANDARD

NUMBER OF RECORDS FOUND 31

RIGHT CLICK ON THE LINK BELOW AND SAVE THE FILE TO YOUR LOCAL DRIVE  
EXCEL ANALYTICAL OUTPUT FILE  
FOR ID: MW-24

QUERY RESULT DATA DISPLAY & DOWNLOAD

100 OBJECT NAME: MW-24

92 SELECT SAMPLE MATRIX (REQUIRED)  
WG

94 SELECT DATA TIME DURATION:  
START DATE: MM/DD/YYYY (OPTIONAL)  
01/10/1990  
END DATE: MM/DD/YYYY (OPTIONAL)  
01/10/1990

96

EXCLUDE NON-DETECT SAMPLES

100 SELECT SCREENING QUERY:  
4. COMPARE ANALYTE CONCENTRATION TO REGULATORY STANDARD

98

102 REGULATORY STANDARD  
CALDHS PRIMARY MCL

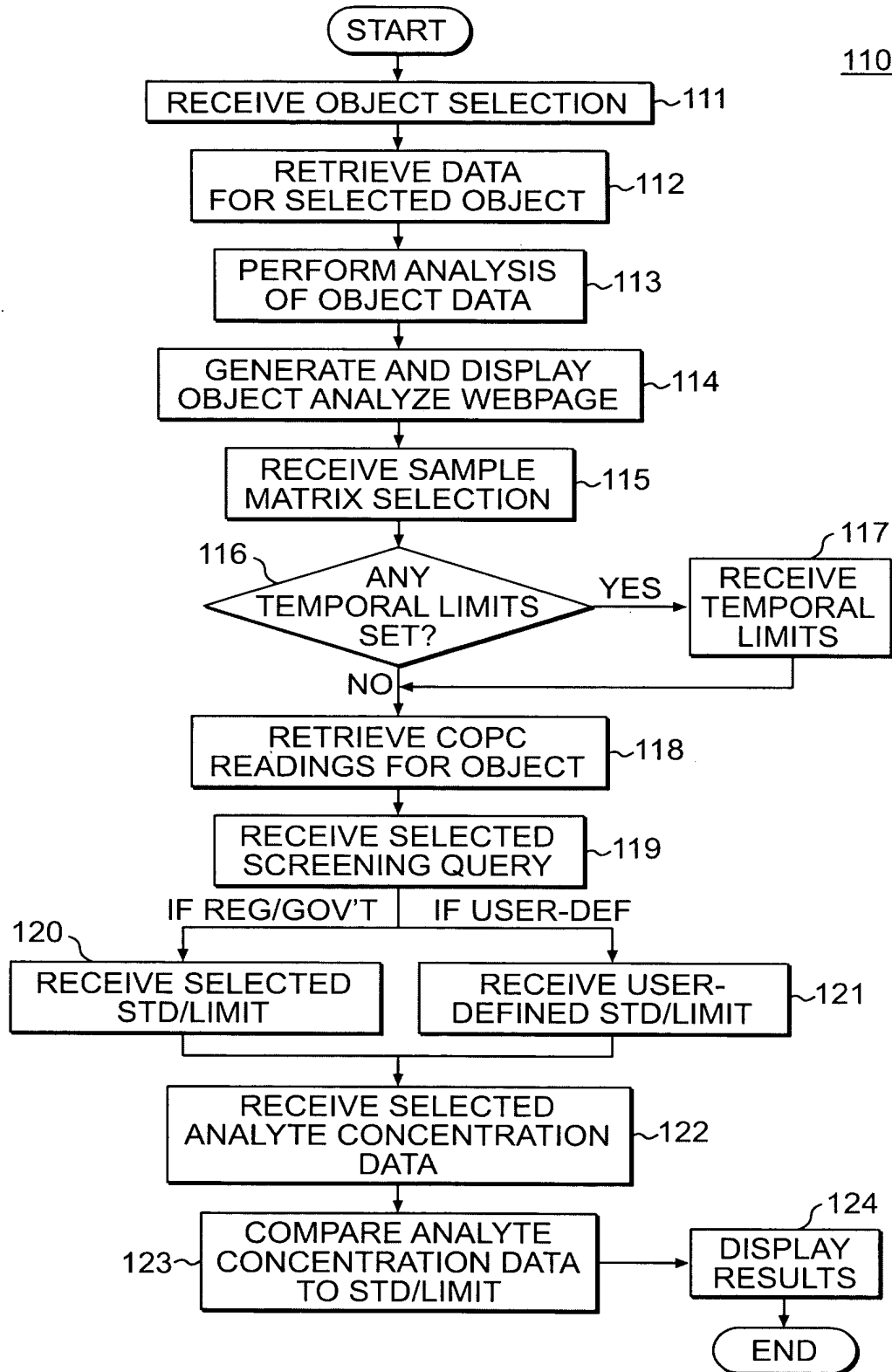
104 ANALYTE  
71-43-2: BENZENE

GO

INTERNET

DONE

FIG. 5b



**FIG. 5c**

Inventor(s): Michael Y. YOUNG, et al.

Contact Name: Sean S. Wooden (202) 662-2700

Attorney Docket No.: 151877

WEBEDMS DEMO SYSTEM - MICROSOFT INTERNET EXPLORER

INTEGRATED ENVIRONMENTAL SERVICES INC. ENVIRONMENTAL DATA MANAGEMENT SYSTEM 793 74 MONDAY, JANUARY 12, 2004

HOME | SUPPORT | DESI | GIS & DATA | PROJECT MGMT. | FILE MGMT. | COLLABORATION | CALENDAR

**MICROSOFT PROJECT CENTRAL** YOU ARE CURRENTLY LOGGED ON AS CONTRACTOR 1

ACTIONS ☒ HOME | TASKS | VIEWS | STATUS REPORTS | OFFLINE | LOG OFF | HELP

☐ VIEWS ☐ VIEW ASSIGNMENTS

☐ OVERVIEW ☐ SEE INFORMATION ABOUT MICROSOFT PROJECT CENTRAL ASSIGNMENTS

☐ VIEW YOUR PORTFOLIO ☐ YOU CAN SEE ASSIGNMENTS THAT HAVE BEEN MADE USING MICROSOFT PROJECT CENTRAL

☐ VIEW ASSIGNMENTS ☐ YOU CAN ONLY SEE ASSIGNMENTS INFORMATION FOR RESOURCES THAT THE MICROSOFT PROJECT CENTRAL ADMINISTRATOR HAS GIVEN YOU PERMISSION TO VIEW

SHOW: ☒ SUMMARY TASKS ☐ SUMMARY ROLLUP ☐ NONWORKING TIME

GROUP BY: ☐ RESOURCE ☐ THEN BY: ☐ PROJECT ☐ THEN BY: ☐ NONE ☐ UNSORT

☐ ZOOM IN ☐ ZOOM OUT ☐ GO TO SELECTED TASK ☐ USAGE VIEW

TASK NAME	START	FINISH	02	NOV '02	DEC '02	JAN '03	FEB '03	MAR '03	APR '03
CONTRACTOR 1	8/1/2002 8:00 AM	4/4/2003 5:00 PM							
08012001 DEMOSITE	8/1/2002 8:00 AM	4/4/2003 5:00 PM							
MONA SYSTEM	8/1/2002 8:00 AM	4/4/2003 5:00 PM							
MONA CONTINGE	8/1/2002 8:00 AM	8/2/2002 10:40 AM							
SOUTHEAST QUI	8/1/2002 8:00 AM	8/2/2002 10:40 AM							
BUILDING E1 F	8/1/2002 8:00 AM	8/1/2002 8:00 AM							
BUILDING E1 F	8/1/2002 8:00 AM	8/2/2002 10:40 AM							
TREATMENT COM	1/10/2003 8:00 AM	4/4/2003 5:00 PM							
CONSTRUCTION	1/10/2003 8:00 AM	4/4/2003 5:00 PM							
CONSTRUCT FO	1/10/2003 8:00 AM	1/21/2003 12:00 PM							
INSTALL ELECTR	2/18/2003 1:00 PM	2/25/2003 12:00 PM							
INSTALL TELEPH	2/18/2003 1:00 PM	2/25/2003 12:00 PM							
RELOCATE VE	3/11/2003 1:00 PM	3/25/2003 12:00 PM							
RELOCATE AIR	2/25/2003 1:00 PM	3/11/2003 12:00 PM							
INSTALL NEW F	3/26/2003 1:00 PM	4/4/2003 5:00 PM							

☒ DONE

☐ UNKNOWN ZONE (MIXED)

FIG. 6



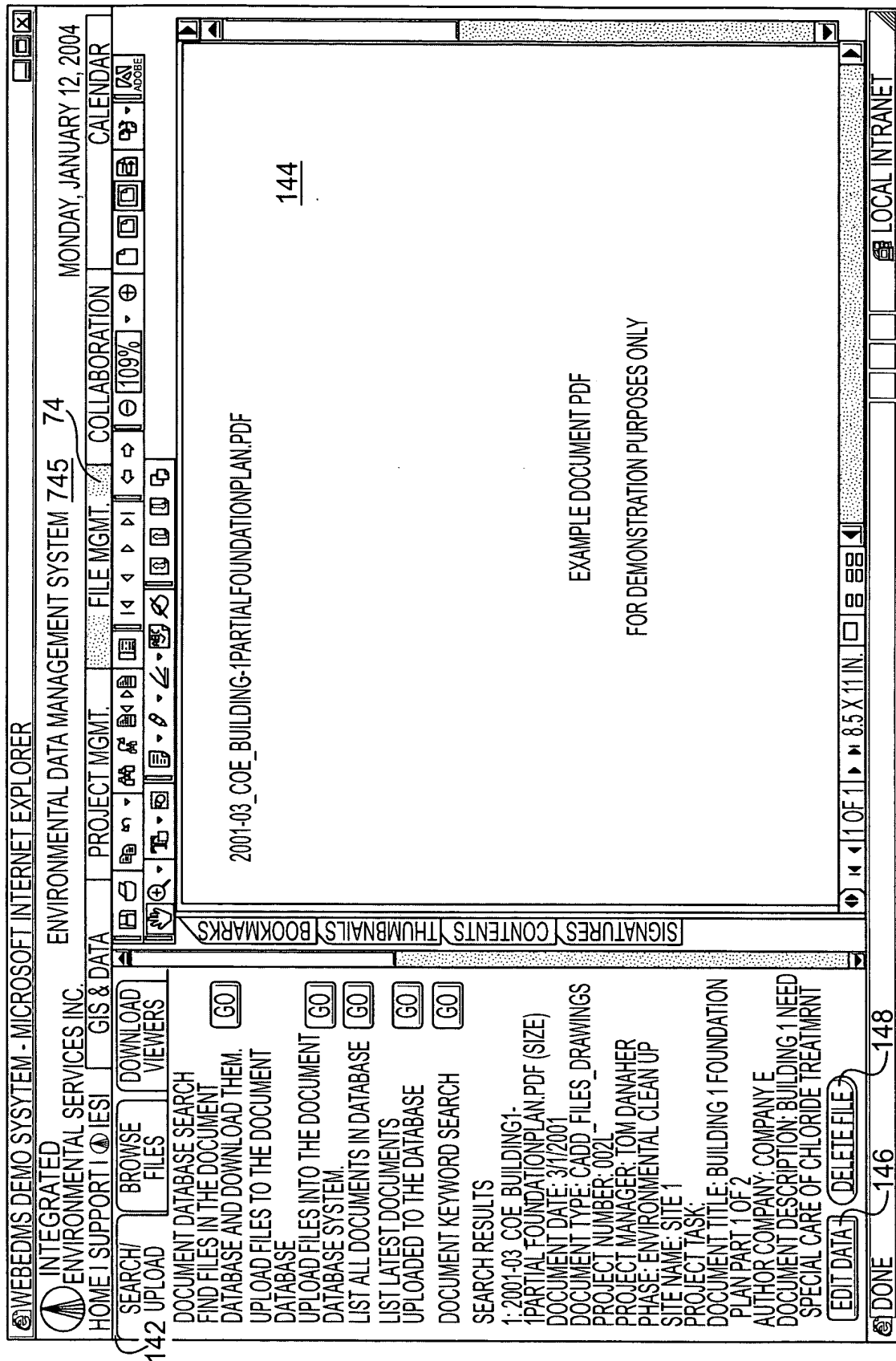


FIG. 7

140

WEBEDMS DEMO SYSTEM - MICROSOFT INTERNET EXPLORER			
INTEGRATED ENVIRONMENTAL SERVICES INC.		ENVIRONMENTAL DATA MANAGEMENT SYSTEM 747 MONDAY, JANUARY 12, 2004	
HOME   SUPPORT	GIS & DATA	PROJECT MGMT.	FILE MGMT. COLLABORATION CALENDAR
152 FILE DROP BOX			
MEET ONLINE KNOWLEDGE BOARDS			
154			
UPLOAD FILES INTO THE DROP BOX FOR PICKUP			
STEP 1: FIND THE FILE YOU WISH TO UPLOAD			
CLICK THE BROWSE BUTTON TO SELECT THE FILE THAT YOU WANT TO ADD YOU CAN UPLOAD UP TO 3 FILES AT A TIME (NOTE: MAX FILE SIZE IS 30 MB)			
156			
SELECT 1ST FILE TO ADD <input type="text"/> BROWSE...			
SELECT 2ND FILE TO ADD <input type="text"/> BROWSE...			
SELECT 3RD FILE TO ADD <input type="text"/> BROWSE...			
STEP 2: CREATE FILE ATTRIBUTES TO HELP THE RECIPIENT FIND IT			
157			
RECIPIENT'S NAME: <input type="text"/>			
UPLOADED BY: <input type="text"/>			
NUMBER DAYS TO LEAVE ON SERVER: <input type="text"/>			
COMMENTS: <input type="text"/>			
STEP 3: START THE FILE UPLOAD TO THE FILE DROP BOX			
158			
CLICK THE ADD FILE BUTTON TO ALLOW OTHER USERS TO DOWNLOAD YOUR FILES			
<input type="button" value="ADD FILE"/>			
150			
LOCAL INTRANET			

FIG. 8

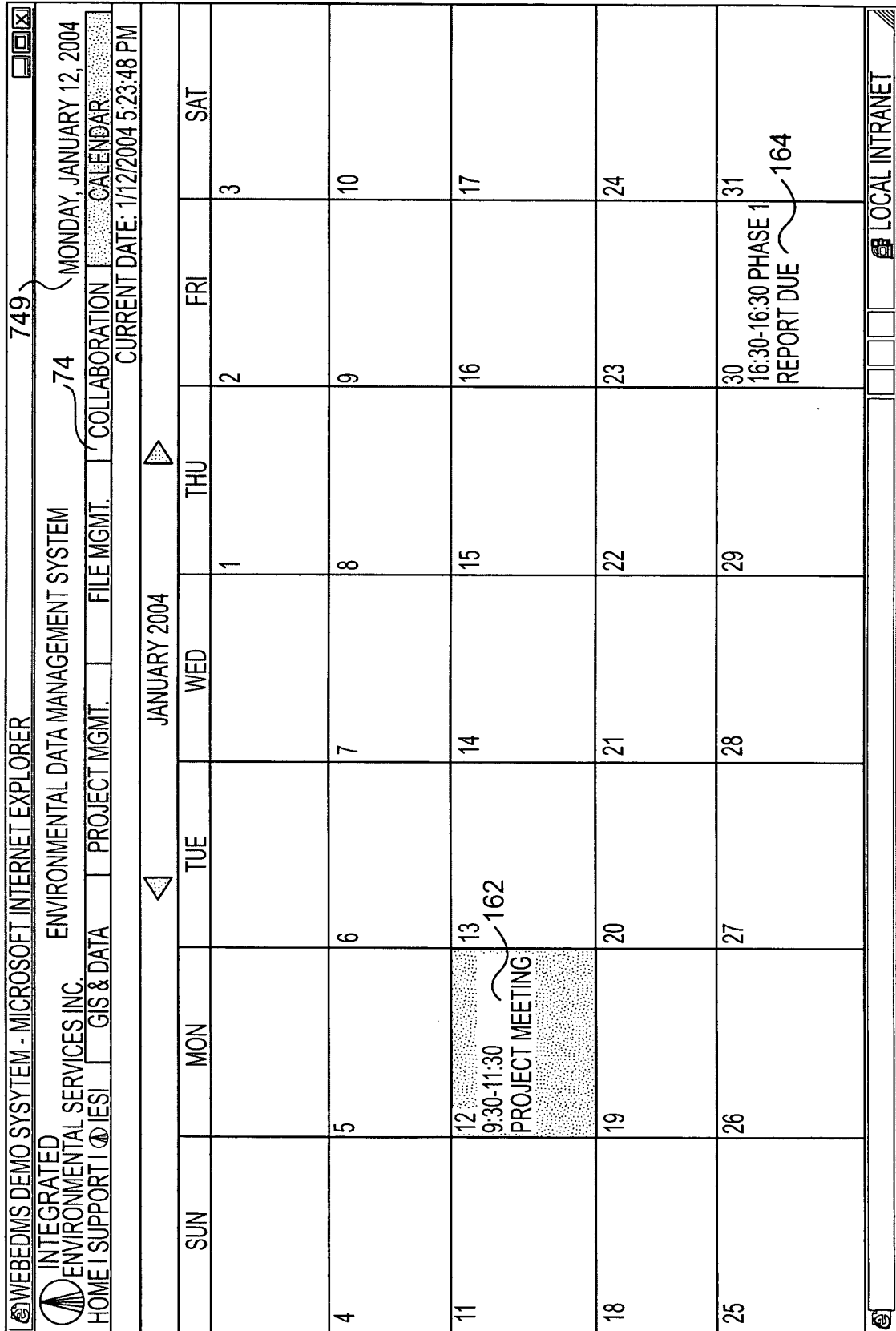


FIG. 9

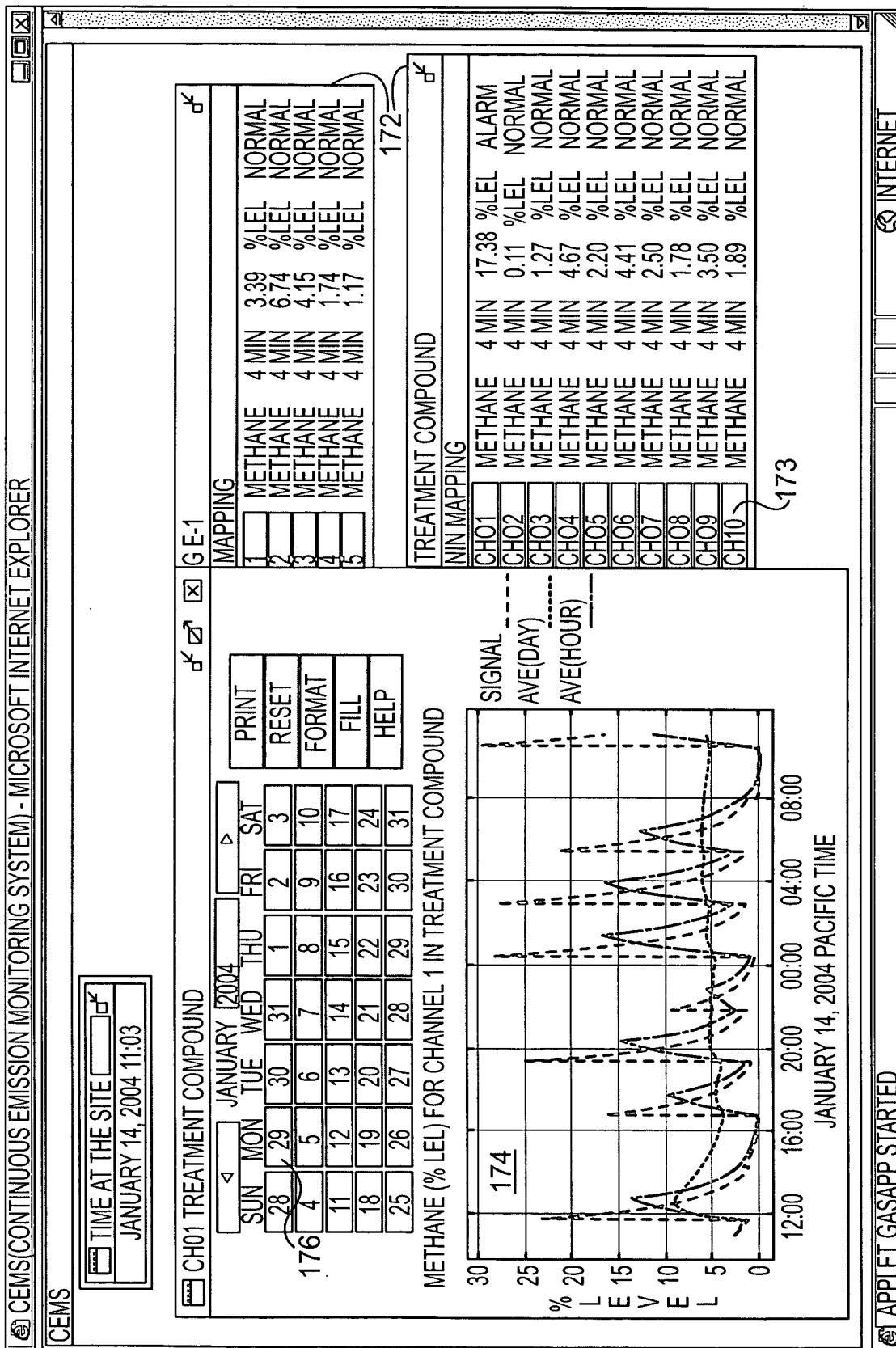


FIG. 10a



Inventor(s): Michael Y. YOUNG, et al.

Contact Name: Sean S. Wooden (202) 662-2700

Attorney Docket No.: 151877

WEBEDMS DEMO SYSTEM - MICROSOFT INTERNET EXPLORER

INTEGRATED ENVIRONMENTAL SERVICES INC. ENVIRONMENTAL DATA MANAGEMENT SYSTEM

HOME | SUPPORT | GIS & DATA | PROJECT MGMT. | FILE MGMT. | COLLABORATION | CALENDAR

MONDAY, JANUARY 12, 2004

CREATE YOUR QUERY USING THE FORM BELOW

SELECT MAP LAYERS  
SELECT AN ACTIVE LAYER  
TURN LAYERS ON/OFF  
(CLEAR LAYERS) (RESET LAYERS)

ENVIRONMENTAL DATA  
NEW DEVELOPMENT  
EXISTING DEVELOPMENT  
BASE MAP INFO  
(CLEAR LAYERS) (RESET LAYERS)

OBJECT SEARCH  
OBJECT FINDER  
SEARCH

REMOTE METHANE MONITORING (AM) ANALYSIS MANAGER (3D) VIEWER (3D) RISK ASSESSMENT (RT) REMEDIAL TECHNOLOGY

COORDS: 485, 529

862

720

700 FT.

0 350 700

72

MW-25 MW-130 MW-28 MW-05 MW-34D MW-35D MW-22 MW-23 MW-29 MW-04A

SELECT SCREENING QUERY: 186  
COMPARE ANALYTE TO REGULATORY STD  
REGULATORY STANDARD: CALDHS PRIMARY MCL  
ANALYTE: 75-01-4: VINYL CHLORIDE  
DISPLAY RESULTS: GREATER THAN STD. 1862 1864  
NUMBER OF RECORDS FOUND: 20 1866  
VIEW CHART DOWNLOAD MS EXCEL FILE  
BELOW STANDARD STANDARD ABOVE STANDARD 1884 188

SELECT DATA TIME DURATION:  
START DATE: MM/DD/YYYY (OPTIONAL) 01/10/1990  
END DATE: MM/DD/YYYY (OPTIONAL) 01/10/2000  
EXCLUDE NON DETECT SAMPLES

SELECT SAMPLE MATRIX (REQUIRED)  
WG 183 182  
DISPLAY TOP ANALYTE  
20 184 185

INTERNET

FIG. 11a

70

Inventor(s): Michael Y. YOUNG, et al.

Contact Name: Sean S. Wooden (202) 662-2700

Attorney Docket No.: 151877

WEBEDMS DEMO SYSTEM - MICROSOFT INTERNET EXPLORER

INTEGRATED ENVIRONMENTAL SERVICES INC. ENVIRONMENTAL DATA MANAGEMENT SYSTEM

HOME | SUPPORT | DESI | GIS & DATA | PROJECT MGMT. | FILE MGMT. | COLLABORATION | MONDAY, JANUARY 12, 2004 | CALENDAR

SELECT MAP LAYERS  
SELECT AN ACTIVE LAYER  
TURN LAYERS ON/OFF  
CLEAR

SELECT YOUR QUERY USING THE FORM BELOW  
SELECT SAMPLE MATRIX (REQUIRED)  
WG 183 182  
DISPLAY TOP ANALYTE  
5 184  
SELECT DATA TIME DURATION:  
START DATE: MM/DD/YYYY (OPTIONAL) 185  
01/10/1990  
END DATE: MM/DD/YYYY (OPTIONAL)  
01/10/2000  
☐ EXCLUDE NON-DETECT SAMPLES

OVERALL SITE CONCENTRATION VS. STANDARD

CONCENTRATION (UNITS) ug/l

72

1886

MW-33 MW-32 MW-19 MW-18 MW-18 STANDARD  
CHEMICAL NAME--VINYL CHLORIDE  
STANDARD VALUE: 2 ug/l

MW-34D MW-35D MW-32 MW-22 MW-23 MW-29 MW-04A MW-05

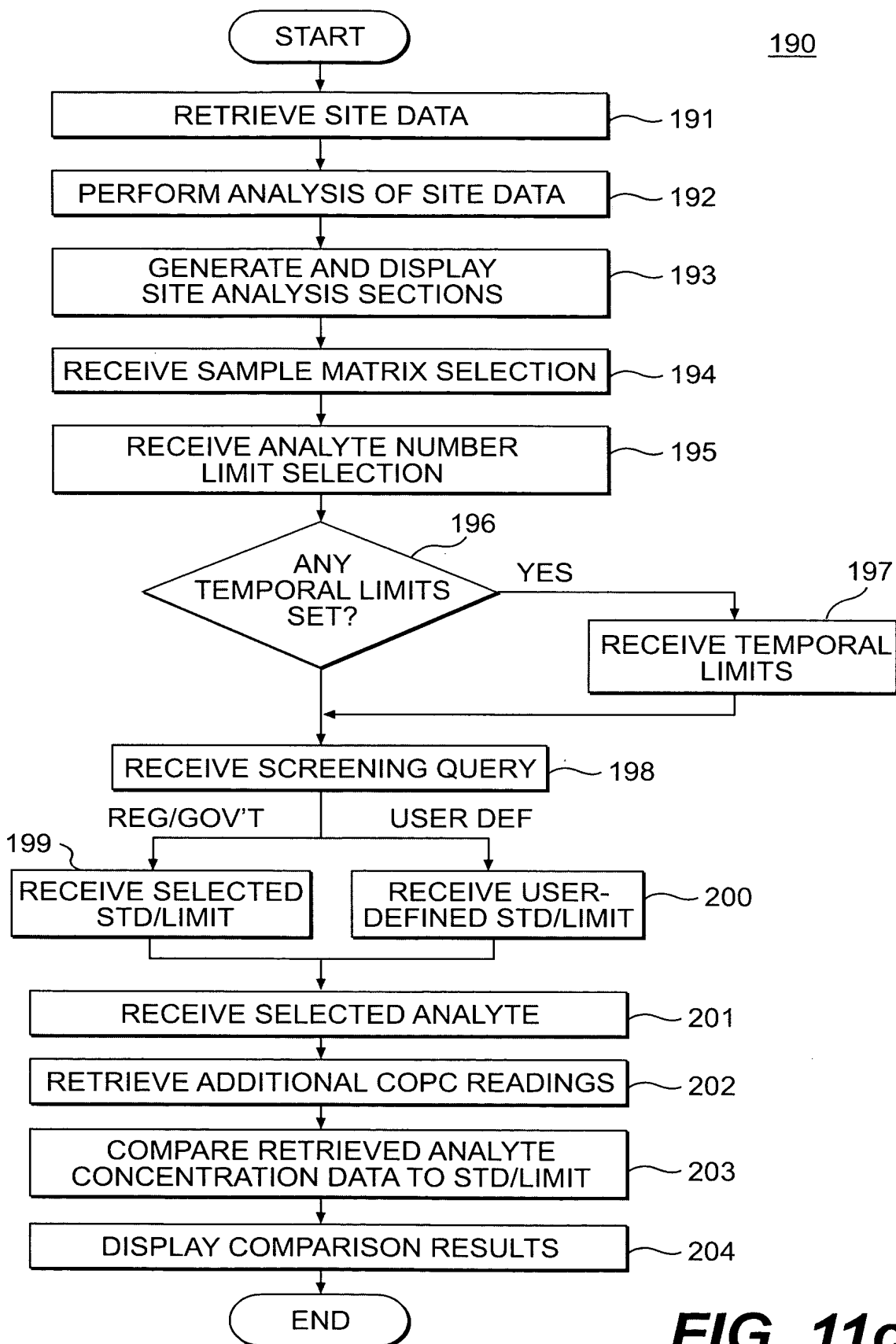
SELECT SCREENING QUERY: 186  
4. COMPARE ANALYTE TO USER DEFINED S  
ANALYTE 1860  
75-01-4::VINYL CHLORIDE  
DISPLAY RESULTS: 1864  
ALL 1866  
USER DEFINED STANDARDS  
2 ug/l 1862  
NUMBER OF RECORDS FOUND: 20  
VIEW CHART DOWNLOAD MS EXCEL FILE  
☐ BELOW STANDARD  
☐ STANDARD  
☒ ABOVE STANDARD 1884 188

OBJECT SEARCH (SEARCH)  
OBJECT FINDER  
REMOTE METHANE MONITORING (RM) ANALYSIS MANAGER (AM) 3D VIEWER (RA) RISK ASSESSMENT (RT) REMEDIAL TECHNOLOGY 1882  
COORDS: 485, 529

INTERNET

FIG. 11b

70



**FIG. 11c**





FIG. 12a



RISK ASSESMENT - MICROSOFT INTERNET EXPLORER

FILE EDIT VIEW FAVORITES TOOLS HELP

LINKS >>

WEBHRAS

232 SITE NAME: CARSON TOWN CENTER

234 JOB NAME: SOUTH QUADRANT

236 ROI NAME: TEST SITE AREA 2

238 SELECT MEDIA: SOIL

START DATE: 6/1/1985 - END DATE: 7/3/2003 - REMARK:

SELECT JUST ONE MEDIA ONLY

SELECT COMPOUND:

TO MANUALLY SELECT ALL DETECTED COPCS MAX CONC. > IND, PPGS MAX CONC. > MCL YOU WILL NOT BE ABLE TO CHANGE THE SELECTED COPC LIST WITH THIS OPTION.

--SELECT COMPOUND--

BENZENE

ETHYLBENZENE

PHCAS DIESEL FUEL

PHCAS DIESEL GASOLINE

TOXICITY: OFEDERAL STATE CALIFORNIA

SELECT RECEPTOR:

TO SELECT MORE THAN ONE RECEPTOR, HOLD DOWN THE CTRL KEY WHILE MAKING SELECTIONS

--SELECT RECEPTOR--

COMMERCIAL WORKER

CONSTRUCTION WORKER

RESIDENTIAL ADULT

RECREATIONAL ADULT

TO SELECT MORE THAN ONE PATHWAY, HOLD DOWN THE CTRL KEY WHILE MAKING SELECTIONS

TO FIG. 13a CONT.

FIG. 13a

TO FIG. 13a CONT.

FROM FIG. 13a

FROM FIG. 13a

246

SELECT PATHWAY:

--SELECT PATHWAY--

DERMAL CONTACT

INHALATION OF INDOOR AIR

INHALATION OF OUTDOOR AIR

INGESTION

248

SELECT HBRGS OR RISK:

☐ HBRGS

☒ RISK

95% UPPER CONFIDENCE LIMIT

250

HQ THRESHOLD:

1

ILCR THRESHOLD:

1E-04

254

PROCEED TO NEXT STEP

252

INTERNET

DONE

FIG. 13a CONT.

RECEPTORS PARAMETERS - MICROSOFT INTERNET EXPLORER

FILE EDIT VIEW FAVORITES TOOLS HELP

LINKS >>

PLEASE REVIEW THE RECEPTOR PARAMETERS BASED ON THE CONDITION YOU HAVE JUST SELECTED.

RECEPTOR PARAMETERS

RECEPTOR	EFD	EFINH	EFING	EDC	EDN	BW	IR	AF	SA	ETIN
COMMERCIAL WORKER	0	250	250	70	25	70	1.25	1	5800	8
CONSTRUCTION WORKER	250	250	250	70	1	70	1.5	1	3760	0
RESIDENTIAL ADULT	400	350	350	70	30	70	0.83	1	5860	16

RETURN TO PREVIOUS STEP

MAKE CHANGES

CONTINUE

NOTES:

EFD: EXPOSURE FREQUENCY DERMAL (DAYS/YEAR)  
EFINH: EXPOSURE FREQUENCY INHALATION (DAYS/YEAR)  
EFING: EXPOSURE FREQUENCY INGESTION (DAYS/YEAR)  
EDC: EXPOSURE DURATION FOR CARCINOGENS (YEARS)  
EDN: EXPOSURE DURATION FOR NON-CARCINOGENS (YEARS)  
BW: BODY WEIGHT (kg)  
IR: INHALATION RATE (INDOOR/OUTDOOR AIR) (m<sup>3</sup>/HOUR)  
IRS: INGESTION RATE OF SOIL (mg/DAY)  
AF: SOIL TO SKIN ADHERENCE FACTOR (mg/cm<sup>2</sup>)  
SA: SKIN SURFACE AREA (cm<sup>2</sup>)  
ETOUT: EXPOSURE TIME OUTDOORS (HOURS/DAY)  
ETIN: EXPOSURE TIME INDOORS (HOURS/DAY)

DONE

INTERNET

FIG. 13b

RECEPTORS PARAMETERS - MICROSOFT INTERNET EXPLORER

FILE EDIT VIEW FAVORITES TOOLS HELP

LINKS >>

PLEASE TYPE OVER THE RECEPTOR PARAMETER THAT YOU WOULD LIKE TO CHANGE.

RECEPTOR PARAMETERS

RECEPTOR	EFD	EFING	EDC	EDN	BW	IR	AF	SA	ETIN
COMMERCIAL WORKER	0	250	70	25	70	1.25	1	5800	8
CONSTRUCTION WORKER	250	250	70	1	70	1.5	1	3760	0
RESIDENTIAL ADULT	400	350	70	30	70	0.83	1	5800	16

ACCEPT CHANGES

CANCEL CHANGES

NOTES:

EFD: EXPOSURE FREQUENCY DERMAL (DAYS/YEAR)

EFINH: EXPOSURE FREQUENCY INHALATION (DAYS/YEAR)

EFING: EXPOSURE FREQUENCY INGESTION (DAYS/YEAR)

EDC: EXPOSURE DURATION FOR CARCINOGENS (YEARS)

EDN: EXPOSURE DURATION FOR NON-CARCINOGENS (YEARS)

BW: BODY WEIGHT (kg)

IR: INHALATION RATE (INDOOR/OUTDOOR AIR) (m<sup>3</sup>/HOUR)

IRS: INGESTION RATE OF SOIL (mg/DAY)

AF: SOIL TO SKIN ADHERENCE FACTOR (mg/cm<sup>2</sup>)

SA: SKIN SURFACE AREA (cm<sup>2</sup>)

ETOUT: EXPOSURE TIME OUTDOORS (HOURS/DAY)

ETIN: EXPOSURE TIME INDOORS (HOURS/DAY)

DONE

INTERNET

FIG. 13C

TO FIG. 13d CONT.

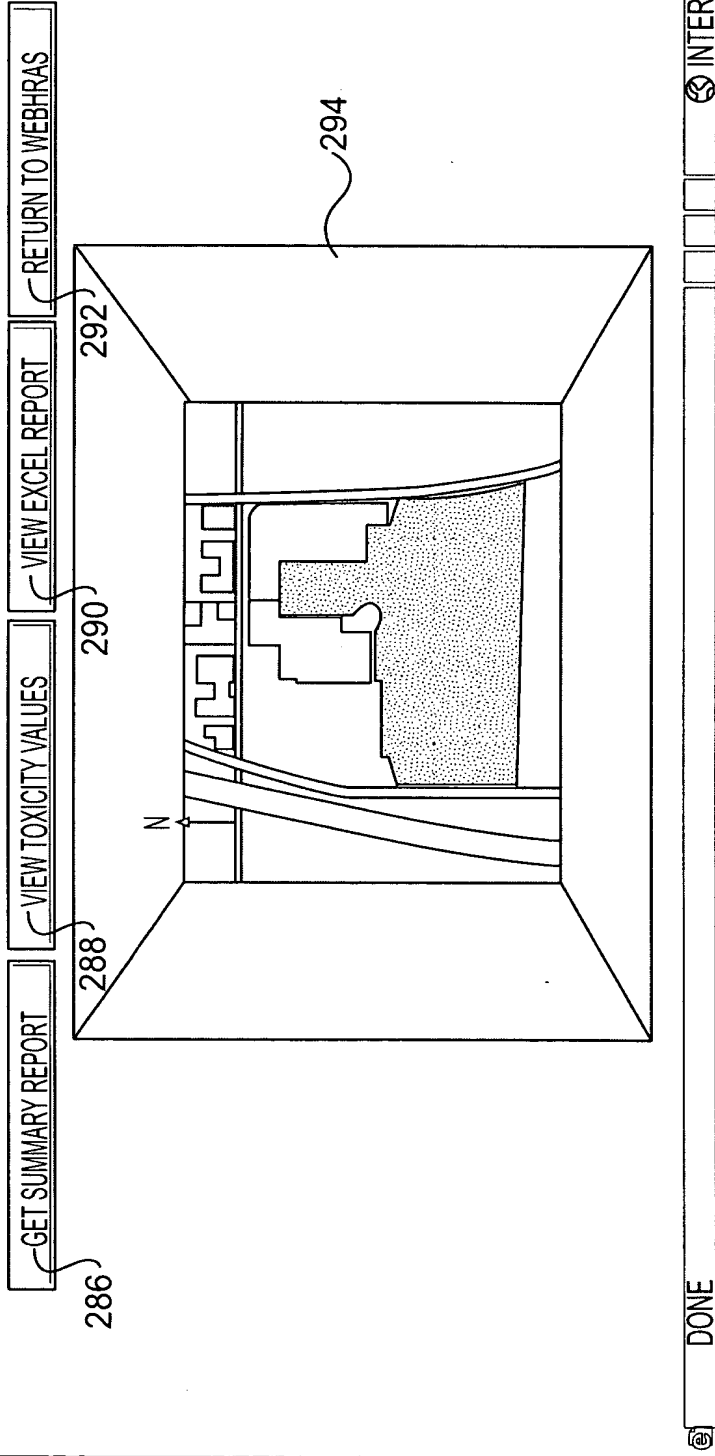
FROM FIG. 13d

FIG. 13d CONT.

FROM FIG. 13d

\*\*\*FOR PURPOSES OF THIS SCREENING LEVEL RISK ASSESSMENT, THE FOLLOWING PATHWAYS ARE CONSIDERED POTENTIALLY COMPLETE FOR EACH RECEPTOR:

1. CONSTRUCTION WORKER: DERMAL CONTACT, INGESTION AND INHALATION OF OUTDOOR AIR.
2. COMMERCIAL WORKER: INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
3. RESIDENTIAL ADULT AND CHILD: DERMAL CONTACT, INGESTION, INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
4. RECREATIONAL ADULT AND CHILD: DERMAL, INGESTION AND INHALATION OF OUTDOOR AIR.
5. IF THE CONCENTRATION COLUMN IS N/A, THE PATHWAY IS CONSIDERED INCOMPLETE.
6. IF THE TOXICITY COLUMN IS N/A, THE PATHWAY IS CONSIDERED INCOMPLETE.
7. WHERE AVAILABLE CHRONIC TOXICITY VALUES ARE USED FOR CONSTRUCTION WORKER.
8. IF LEAD IS A PRIMARY COPC, ADDITIONAL EVALUATION IS NECESSARY.
9. COMPOUNDS WITHOUT REQUIRED PARAMETERS FOR RISK-BASED CALCULATOR WILL BE EXCLUDED AND CAN BE VIEWED TRANSACTION LOG STEP 1b.





SITE NAME: CARSON TOWN CENTER - JOB NAME: SOUTH QUADRANT

SITE NAME: CARSON TOWN CENTER - JOB NAME: SOUTH QUADRANT

ROI NAME: TEST SITE AREA 2 - START DATE: 8/1/1985 12:00:00 PM - END DATE: 7/3/2003 12:00:00 PM

MEDIA: SOIL - SOIL TYPE: SILT - REPORT DATE/TIME: 1/12/2004 8:36:29 PM

RECEPTOR: COMMERCIAL WORKER, CONSTRUCTION WORKER, RESIDENTIAL ADULT

**PATHWAY: DERMAL CONTACT. INHALATION OF INDOOR AIR**

RISK - CONCENTRATION BASIS: 95% UPPER CONFIDENCE LIMIT - HQ THRESHOLD: 1.E+0 - ILCR THRESHOLD: 1.E-4

COMPOUND	CUMULATIVE HQ SUMMARY					CUMULATIVE ILCR SUMMARY									
	INGESTION	DERMAL	OUTDOOR AIR	INDOOR AIR	ALL PATHWAYS	INGESTION	DERMAL	OUTDOOR AIR	INDOOR AIR	ALL PATHWAYS					
COMMERCIAL WORKER	3020					3022					3026				
BENZENE	N/A	N/A	N/A	5.34E-1	5.34E-1	N/A	N/A	N/A	9.13E-5	9.13E-5					
ETHYLBENZENE	N/A	N/A	N/A	2.05E-3	2.05E-3	N/A	N/A	N/A	2.28E-8	2.28E-8					
PHC AS DIESEL FUEL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
PHC AS GASOLINE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
TETRACHLOROETHYLENE(PCE)	N/A	N/A	N/A	1.97E-3	1.97E-3	N/A	N/A	N/A	5.02E-5	5.02E-5					
TOLUENE	N/A	N/A	N/A	1.37E-2	1.37E-2	N/A	N/A	N/A	N/A	N/A					
TRICHLOROETHYLENE(TCE)	N/A	N/A	N/A	1.72E-2	1.72E-2	N/A	N/A	N/A	1.72E-8	1.72E-8					
XYLENES, TOTAL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
CUMULATIVE HQ/ILCR	N/A	N/A	N/A	5.69E-1	5.69E-1	N/A	N/A	N/A	1.45E-4	1.45E-4					
COMMERCIAL WORKER	3028					3030					3032				
BENZENE	N/A	1.51E-4	N/A	N/A	1.51E-4	N/A	2.49E-8	N/A	N/A	2.49E-8					
ETHYLBENZENE	N/A	8.97E-6	N/A	N/A	8.97E-6	N/A	3.69E-9	N/A	N/A	3.69E-9					
PHC AS DIESEL FUEL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
PHC AS GASOLINE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
TETRACHLOROETHYLENE(PCE)	N/A	6.78E-7	N/A	N/A	6.78E-7	N/A	3.53E-9	N/A	N/A	3.53E-9					

TO FIG. 13e CONT.

FIG. 13a

TO FIG. 13e CONT.

FROM FIG. 13e

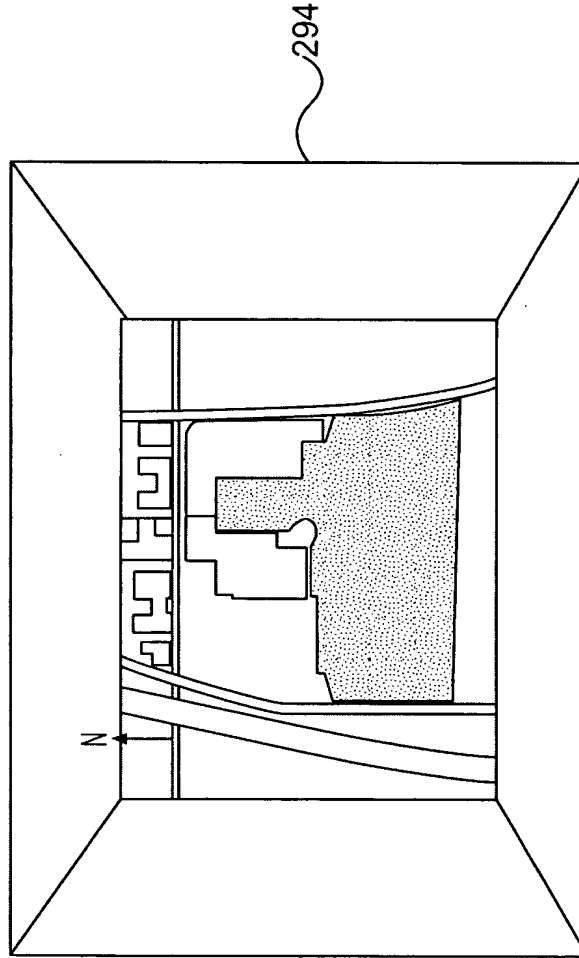
**FIG. 13e CONT.**

FROM FIG. 13e

\*\*\*FOR PURPOSES OF THIS SCREENING LEVEL RISK ASSESSMENT, THE FOLLOWING PATHWAYS ARE CONSIDERED POTENTIALLY COMPLETE FOR EACH RECEPTOR:

1. CONSTRUCTION WORKER: DERMAL CONTACT WITH SOIL AND GROUNDWATER, AND INHALATION OF OUTDOOR AIR.
2. COMMERCIAL WORKER: INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
3. RESIDENTIAL ADULT AND CHILD: DERMAL CONTACT WITH SOIL, INGESTION OF SOIL, INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
4. RECREATIONAL ADULT AND CHILD: DERMAL WITH SOIL, INGESTION OF SOIL AND INHALATION OF OUTDOOR AIR.

304 GET SUMMARY REPORT 306 VIEW TOXICITY VALUES 290 VIEW EXCEL REPORT 292 RETURN TO WEBHRAS



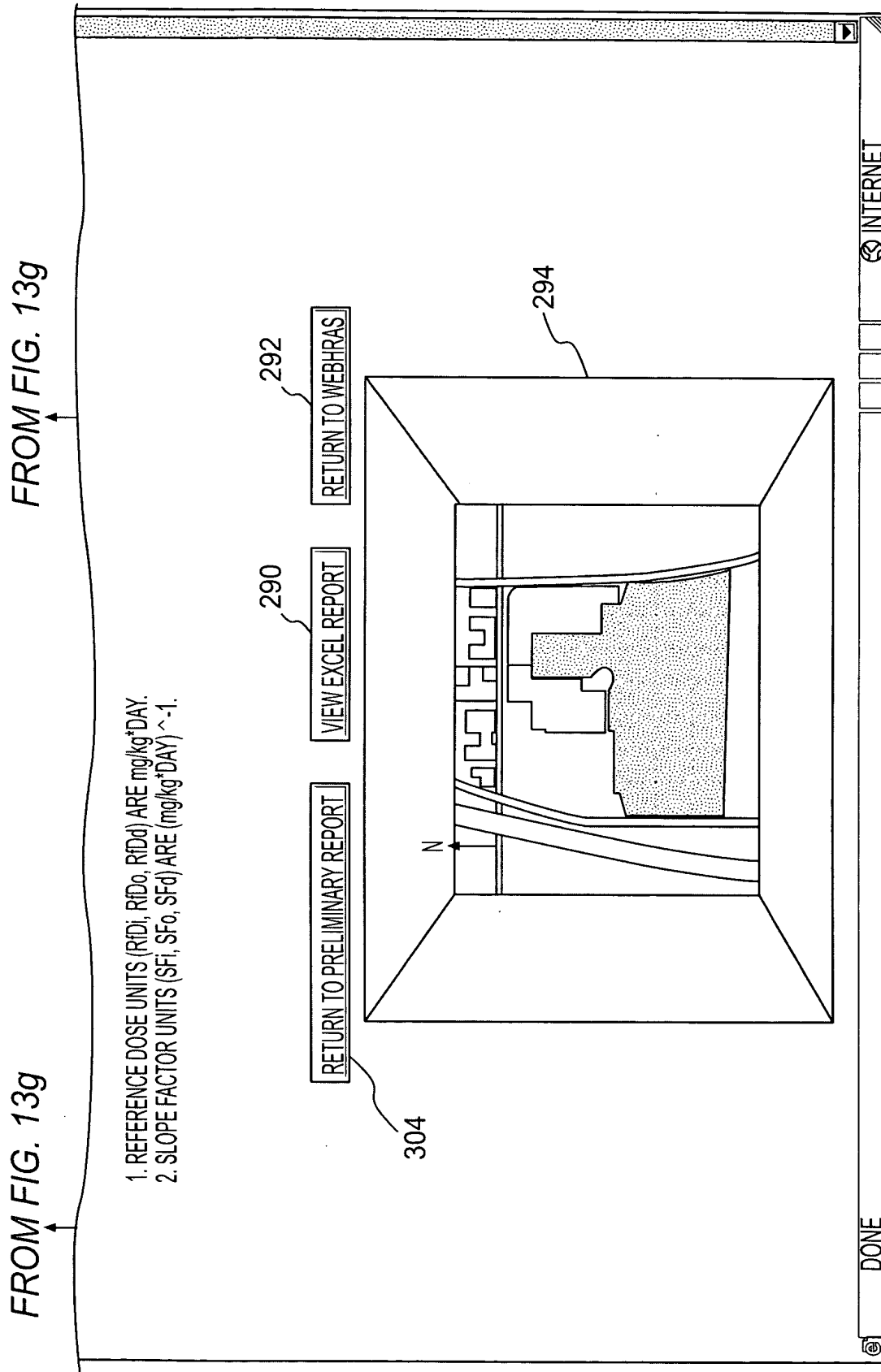
DONE

INTERNET

SUMMARY REPORT - MICROSOFT INTERNET EXPLORER	
FILE	EDIT VIEW FAVORITES TOOLS HELP
<div><div>LINKS &gt;&gt;</div><div>RISK CHARACTERIZATION SUMMARY REPORT</div><div><div>ROI NAME: CARSON TOWN CENTER - JOB NAME: SOUTH QUADRANT</div><div>TEST SITE AREA 2 - START DATE: 8/1/1985 12:00:00 PM - END DATE: 7/3/2003 12:00:00 PM</div><div>MEDIA: SOIL - SOIL TYPE: SILT - REPORT DATE/TIME: 1/12/2004 8:36:29 PM</div><div>RECEPTOR: COMMERCIAL WORKER, CONSTRUCTION WORKER, RESIDENTIAL ADULT</div><div>PATHWAY: DERMAL CONTACT, INHALATION OF INDOOR AIR</div><div>RISK - CONCENTRATION BASIS: 95% UPPER CONFIDENCE LIMIT - HQ THRESHOLD: 1.E+0 - ILCR THRESHOLD: 1.E-4</div></div><div>310</div><div>282</div></div>	
TRANSACTION LOG FILE	
STEP	TRANSACTION LOG FILE
<div>DOWNLOAD ALL LOGS</div> <div>STEP 1A_USER_QUERY.TXT</div>	<div>TRANSACTION LOG FILE: STEP1a_USER_QUERY.TXT</div> <div>DESCRIPTION: INITIAL USER SELECTED CRITERIA</div> <div>DATE/TIME: 1/12/2004 8:36:24 PM</div> <div>312</div> <div>SITE NAME = CARSON TOWN CENTER</div> <div>JOB NAME = SOUTH QUADRANT</div> <div>NAME ROI = TEST SITE AREA 2</div> <div>MEDIADESC = SOIL</div> <div>SCS_DESC = SILT</div> <div>RECEPTORID = CM1; CT1; RA1</div> <div>PATHWAYID = DC1; GA3</div> <div>CALCULATIONDESC = 95% UPPER CONFIDENCE LIMIT</div> <div>CASNO =</div> <div>HBRGTYPE = RISK</div> <div>HQ_THRESHOLD = 1</div> <div>ILCR_THRESHOLD = 0.0001</div> <div>TOXICITY = CA</div> <div>314</div>
<div>304</div> <div>RETURN TO PRELIMINARY REPORT</div> <div>RETURN TO WEBHRAS</div> <div>292</div> <div>DONE</div>	

FIG. 13f





**FIG. 13g CONT.**

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http://192.168.1.62/WEBEDMS/xls/011204_204742_207_PR.XLS-Microsoft Internet Explorer										
File Edit View Insert Format Tools Data Go To Favorites Help										
A1	fx									
	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11	RECEPTOR	PATHWAY	COMPOUND	CONCENTRATION	HQ CALCULATION	CDI(mg/kg	HQ (untitled	CDI(mg/kg CSF (kg*d	ILCR	
12										
13	COMMERCIAL WORK	INHALATION OF INDOOR	BENZENE	1.228371028	0.000913	0.00171	0.533737	0.000913	0.1	9.13E
14	COMMERCIAL WORK	INHALATION OF INDOOR	ETHYLBENZENE	2.608454599	0.000595	0.29	0.00205	0.000595	0.00385	2.29E
15	COMMERCIAL WORK	INHALATION OF INDOOR	PHC AS DIESEL FU	399.9914476						
16	COMMERCIAL WORK	INHALATION OF INDOOR	PHC AS GASOLINE	325.1535332						
17	COMMERCIAL WORK	INHALATION OF INDOOR	TETRACHLOROETH	0.18427058	0.0000334	0.17	0.001967	0.000334	0.15	5.02E
18	COMMERCIAL WORK	INHALATION OF INDOOR	TOLUENE	4.221836238	0.001507	0.11	0.013697	0.001507		
19	COMMERCIAL WORK	INHALATION OF INDOOR	TRICHLOROETHYLE	0.144122158	0.000172	0.01	0.017152	0.000172	0.01	1.72E

↓  
CONT. TO FIG 13h

FIG. 13h

↓  
CONT. TO FIG 13h

**FIG. 13h CONT.**

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RISK ASSESSMENT - MICROSOFT INTERNET EXPLORER

webHRAS

SITE NAME: CARSON TOWN CENTER

JOB NAME: SOUTH QUADRANT

ROI NAME: TEST SITE AREA 2 START DATE: 8/1/1985 - END DATE: 7/3/2003 - REMARK

SELECT MEDIA: SOIL SI-SILT

SELECT COMPOUND:

MANUALLY SELECT ALL DETECTED COPCs MAX CONC>IND.PRGs MAX CONC.> MCL  
YOU WILL NOT BE ABLE TO CHANGE THE SELECTED COPC LIST WITH THIS OPTION

SELECT COMPOUND--

BENZENE

ETHYL BENZENE

PHCAS DIESEL FUEL

PHCAS GASOLINE

TOXICITY: FEDERAL STATE CALIFORNIA

SELECT RECEPTOR:

SELECT RECEPTOR--

COMMERCIAL WORKER

RESIDENTIAL CHILD

CONSTRUCTION WORKER

RESIDENTIAL ADULT

SELECT PATHWAY:

SELECT PATHWAY--

DERMAL CONTACT

INHALATION OF INDOOR AIR

INHALATION OF OUTDOOR AIR

INGESTION

SELECT HBRGs OR RISK: HBRGs RISK

HQ THRESHOLD: 1 ILCR THRESHOLD: 1E-04

PROCEED TO NEXT STEP

DONE Internet

FIG. 14a



HQ/ILCR REPORT - MICROSOFT INTERNET EXPLORER									
HQ/ILCR PRELIMINARY REPORT									
SITE NAME: CARSON TOWN CENTER - JOB NAME: SOUTH QUADRANT									
ROI NAME: TEST SITE AREA 2 - START DATE: 8/1/1985 12:00:00 PM - END DATE: 7/3/2003 12:00:00 PM									
MEDIA: SOIL - SOIL TYPE: SILT - REPORT DATE/TIME: 1/29/2004 4:31:23 PM									
RECEPTOR: COMMERCIAL WORKER, RESIDENTIAL CHILD									
PATHWAY: DERMAL CONTACT, INHALATION OF INDOOR AIR									
HBRG - CONCENTRATION BASIS: UNITY - HQ THRESHOLD: 1.E+0 - ILCR THRESHOLD: 1.E-4									
RECEPTOR/PATHWAY	COMPOUND	CONCENTRATION (mg/kg)	HQ CALCULATION			ILCR CALCULATION			
			CDI (mg/kg*DAY)	RfD (mg/kg*DAY)	HQ (UNITLESS)	CDI (mg/kg*DAY)	CSF (kg*DAY/mg)	ILCR (UNITLESS)	
RECEPTOR: COMMERCIAL WORKER									
INHALATION OF INDOOR AIR	BENZENE	1.E+0	7.52E-4	1.71E+3	4.4E+1	7.62E-4	1.E+1	7.62E-6	350
INHALATION OF INDOOR AIR	ETHYL BENZENE	1.E+0	2.67E-4	2.9E+1	9.2E+4	2.67E-4	3.85E+3	1.03E-5	
INHALATION OF INDOOR AIR	PHCAS DIESEL FUEL	1.E+0	N/A	N/A	N/A	N/A	N/A	N/A	
INHALATION OF INDOOR AIR	PHCAS GASOLINE	1.E+0	N/A	N/A	N/A	N/A	N/A	N/A	
INHALATION OF INDOOR AIR	TETRACHLOROETHYLENE(PCE)	1.E+0	1.16E-3	1.7E+1	6.81E+3	1.16E-3	1.5E+1	1.74E-4	
INHALATION OF INDOOR AIR	TOLUENE	1.E+0	4.01E-4	1.1E+1	3.64E-3	4.01E-4	N/A	N/A	
INHALATION OF INDOOR AIR	TRICHLOROETHYLENE(TCE)	1.E+0	6.61E-4	1.E-2	6.61E+2	6.61E-4	1.E+2	6.61E-6	
INHALATION OF INDOOR AIR	XYLENES, TOTAL	1.E+0	N/A	2.9E-2	N/A	N/A	N/A	N/A	
RECEPTOR: RESIDENTIAL CHILD									
DERMAL CONTACT	BENZENE	1.E+0	1.28E-6	3.E-3	4.26E-4	1.28E-6	5.67E+2	7.25E-8	
DERMAL CONTACT	ETHYL BENZENE	1.E+0	1.28E-6	9.7E+2	1.32E+5	1.28E-6	3.85E+3	4.92E+9	
DERMAL CONTACT	PHCAS DIESEL FUEL	1.E+0	N/A	N/A	N/A	N/A	N/A	N/A	
DERMAL CONTACT	PHCAS GASOLINE	1.E+0	N/A	N/A	N/A	N/A	N/A	N/A	
DERMAL CONTACT	TETRACHLOROETHYLENE(PCE)	1.E+0	1.28E-6	1.E-2	1.28E-4	1.28E+6	5.2E+2	6.65E-8	
DERMAL CONTACT	TOLUENE	1.E+0	1.28E-6	1.5E+1	7.99E-6	1.28E-6	N/A	N/A	
DERMAL CONTACT	TRICHLOROETHYLENE(TCE)	1.E+0	1.28E-6	9.E-4	1.42E-3	1.28E-6	7.33E+2	9.37E-8	

TO FIG. 14b CONT.

FIG. 14b

TO FIG. 14b CONT.

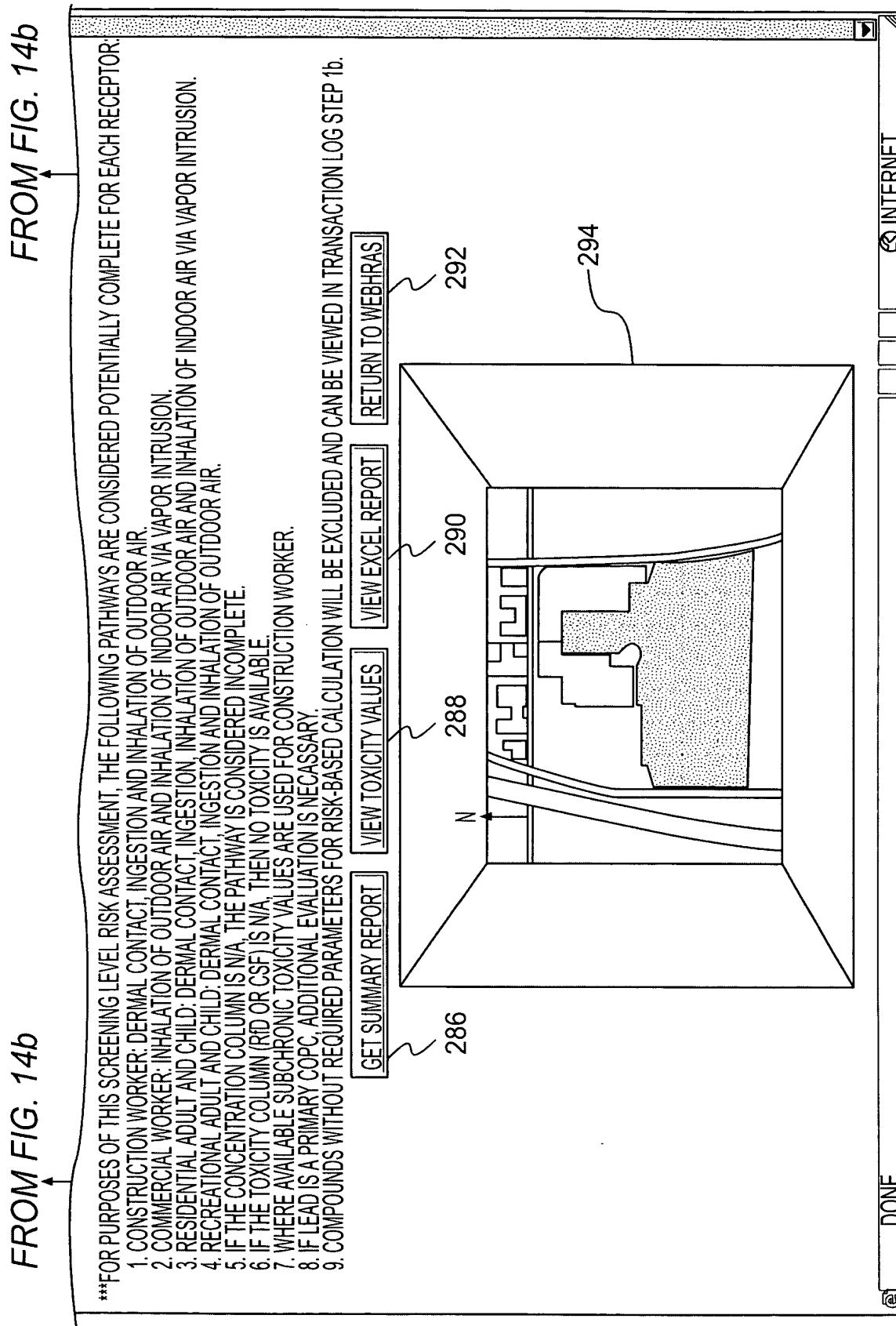


FIG. 14b CONT.

TO FIG. 14c CONT.

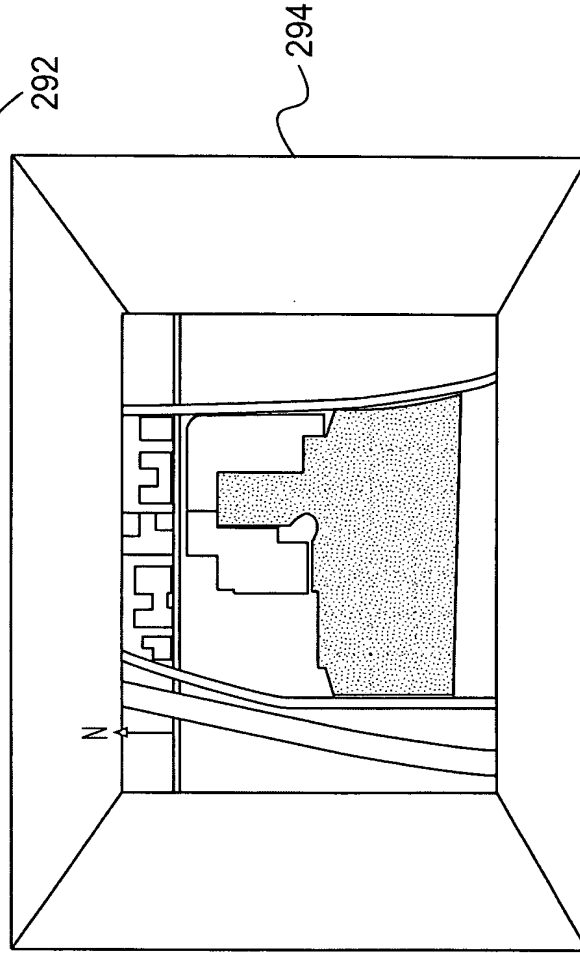
FROM FIG. 14c

FROM FIG. 14c

\*\*\*FOR PURPOSES OF THIS SCREENING LEVEL RISK ASSESSMENT, THE FOLLOWING PATHWAYS ARE CONSIDERED POTENTIALLY COMPLETE FOR EACH RECEPTOR:

1. CONSTRUCTION WORKER: DERMAL CONTACT WITH SOIL AND GROUNDWATER, INGESTION OF SOIL AND GROUNDWATER, AND INHALATION OF OUTDOOR AIR.
2. COMMERCIAL WORKERS: INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
3. RESIDENTIAL ADULT AND CHILD: DERMAL CONTACT WITH SOIL, INGESTION OF SOIL, INHALATION OF OUTDOOR AIR AND INHALATION OF INDOOR AIR VIA VAPOR INTRUSION.
4. RECREATIONAL ADULT AND CHILD: DERMAL CONTACT WITH SOIL, INGESTION OF SOIL AND INHALATION OF OUTDOOR AIR.

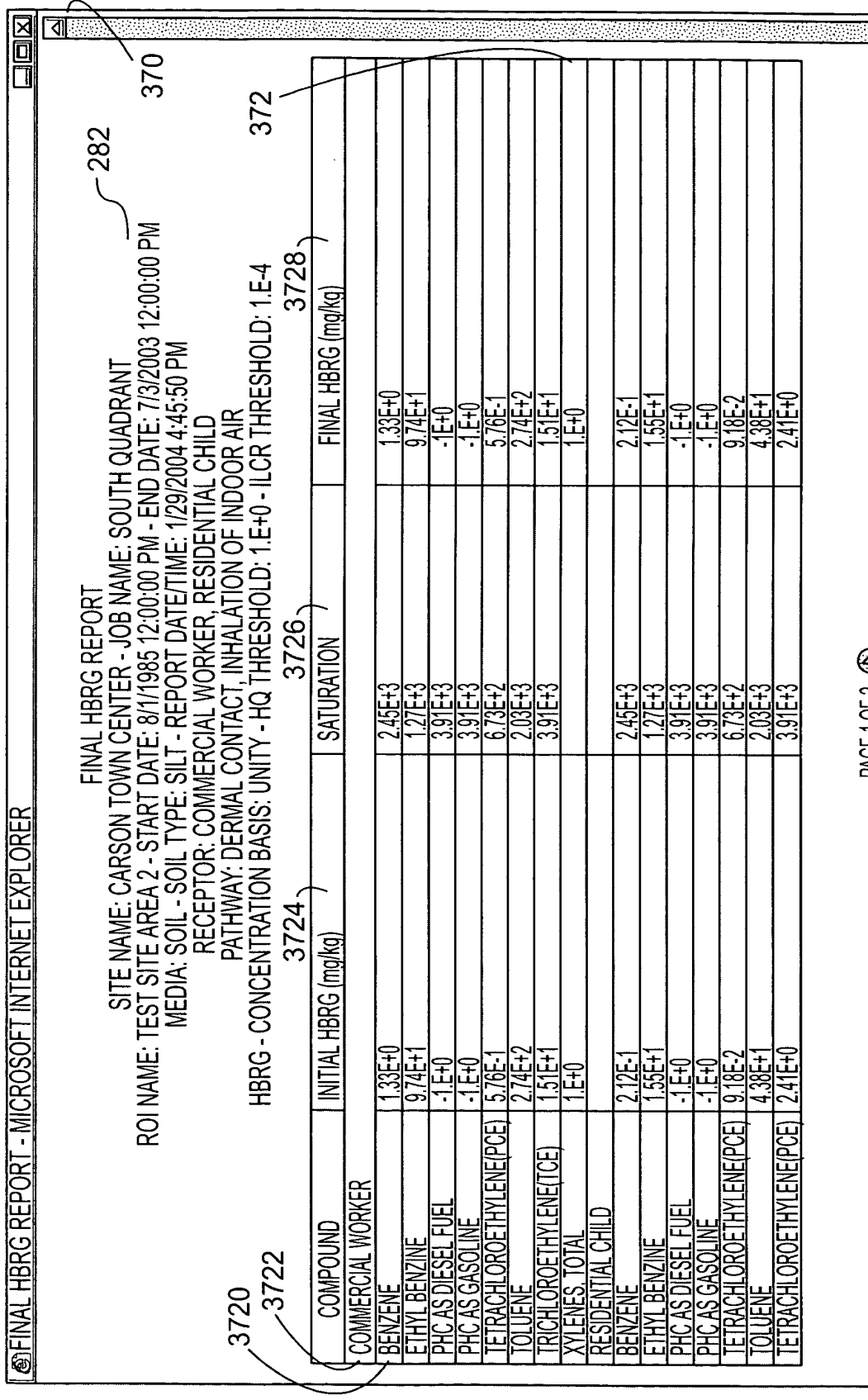
304 RETURN TO PRELIMINARY REPORT VIEW FINAL HBRG REPORT 306 VIEW TRANSACTION LOG  
290 VIEW EXCEL REPORT RETURN TO WEBHRAS 292



Ⓜ DONE

INTERNET

FIG. 14c CONT.



TO FIG. 14d CONT.

FIG. 14d

TO FIG. 14d CONT.

FROM FIG. 14d

FROM FIG. 14d

1. THE FINAL HBRG FOR SOIL IS EITHER THE LOWER OF THE INITIAL HBRG OR THE SATURATION CONCENTRATION.
2. THE FINAL HBRG FOR GROUND WATER IS EITHER THE LOWER OF THE INITIAL HBRG OR THE COMPOUNDS PURE COMPONENT SOLUBILITY
3. THE INITIAL HBRG IS EITHER THE LOWER OF THE THEORETICAL SCALED CONCENTRATION (HQ-BASED) HBRG OR (ILCA-BASED) HBRG.

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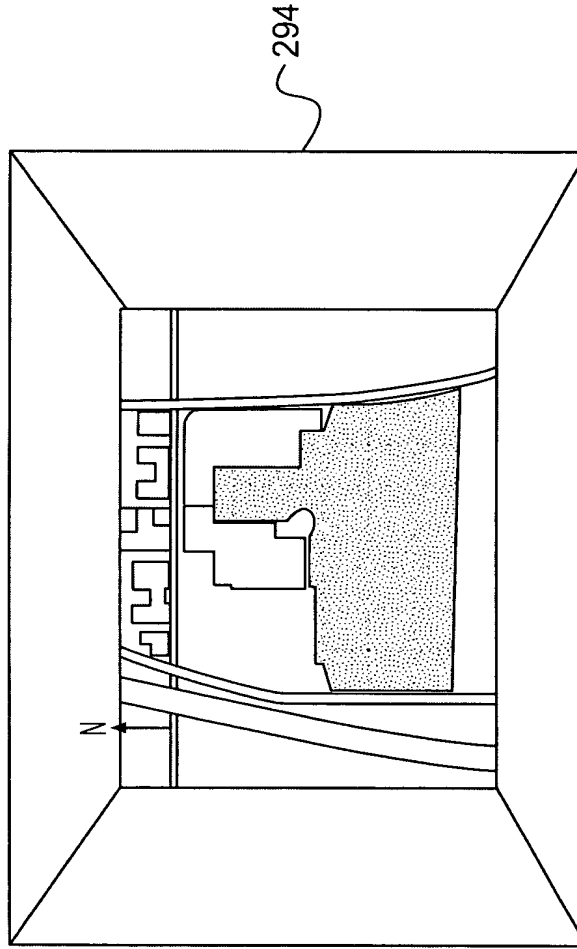
RETURN TO SUMMARY REPORT

396

VIEW EXCEL REPORT

398

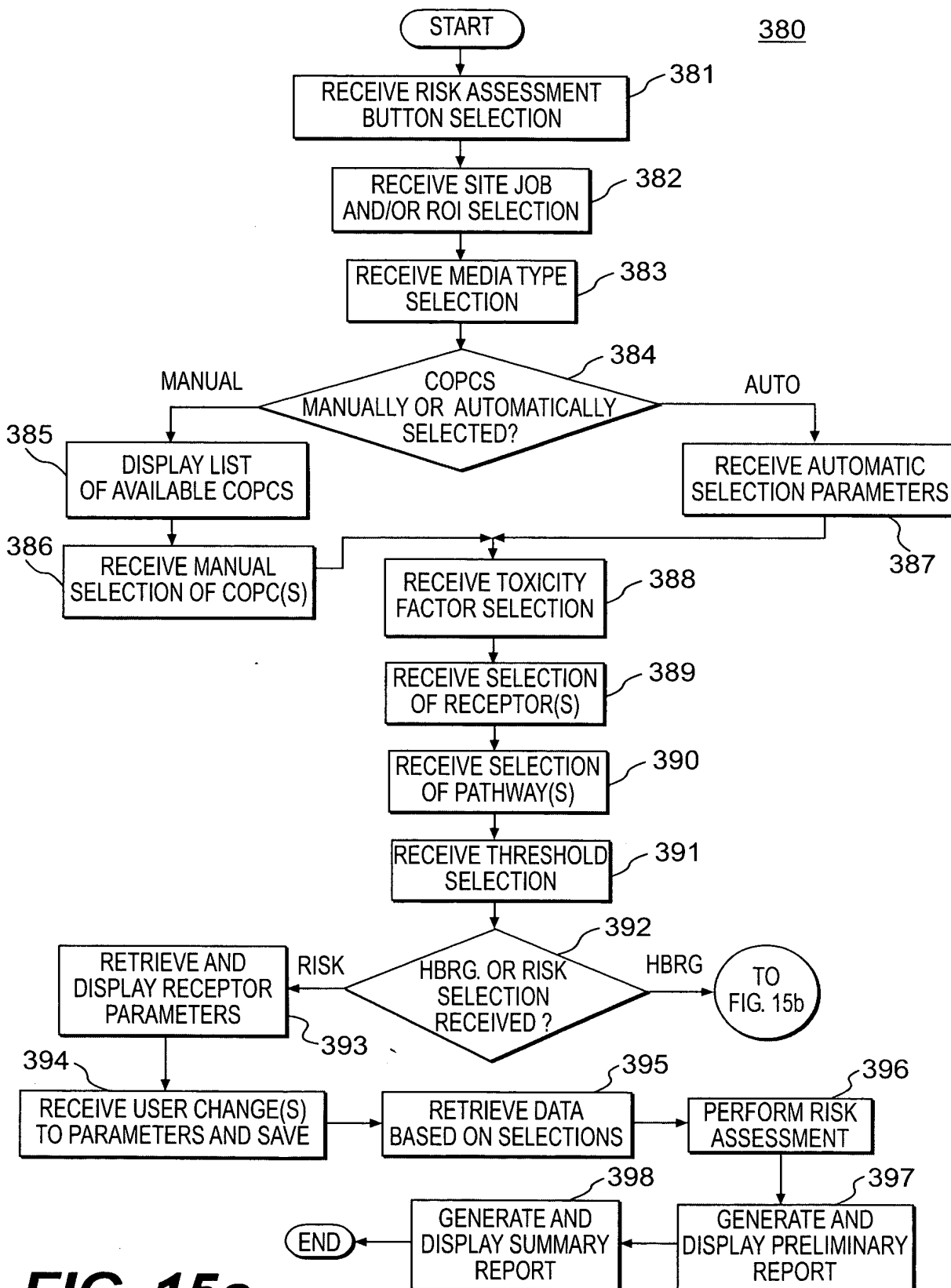
RETURN TO WEBHRAS



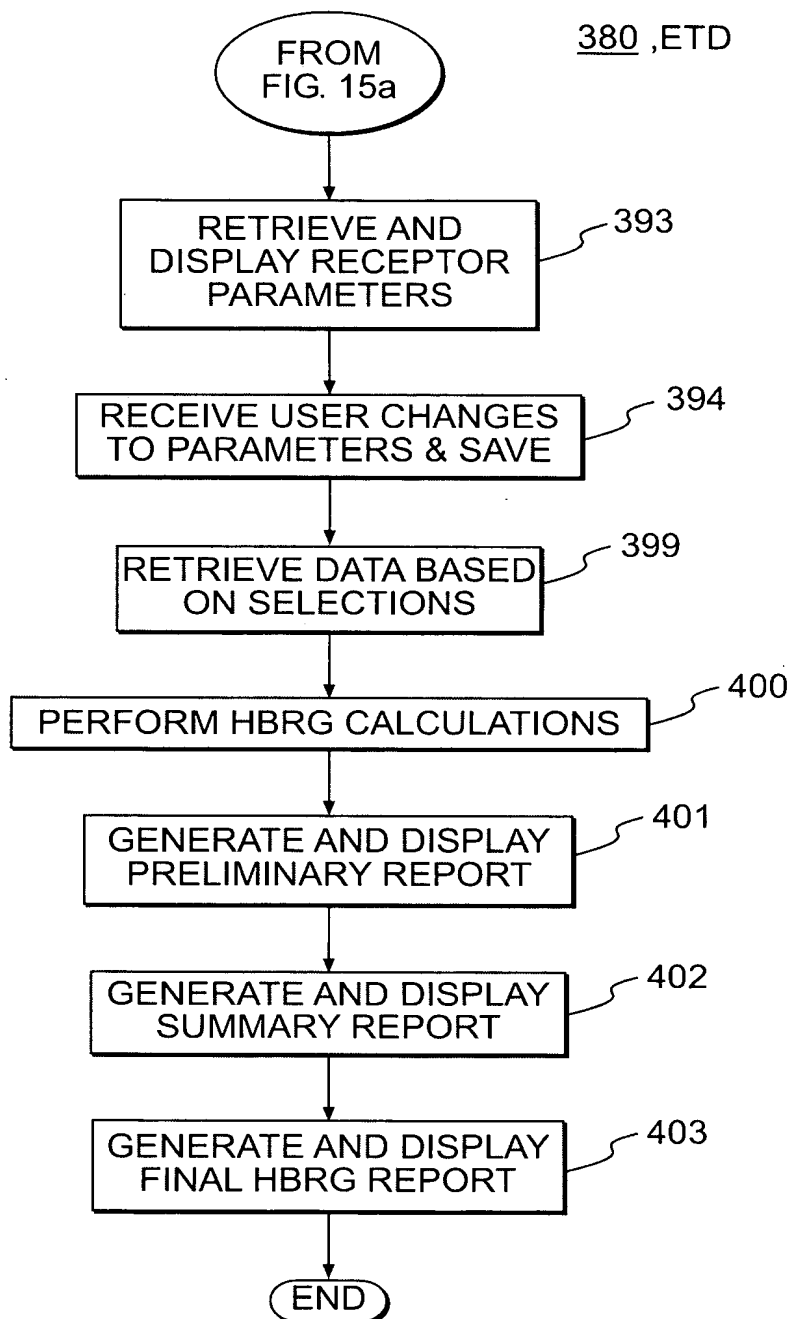
DONE

INTERNET

FIG. 14d CONT.



**FIG. 15a**

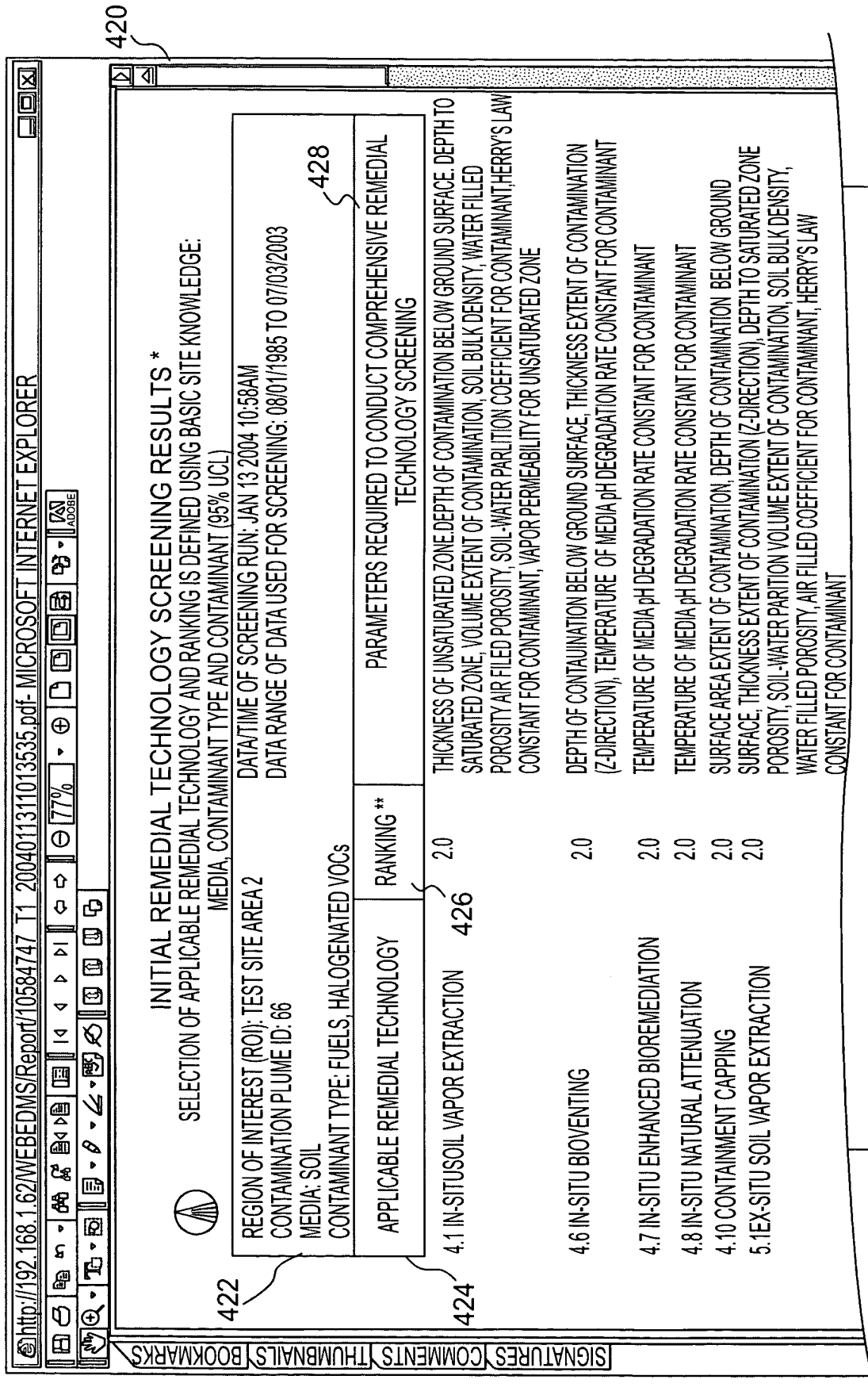


**FIG. 15b**





FIG. 16a



TO FIG16b CONT.

FIG. 16b

TO FIG16b CONT.

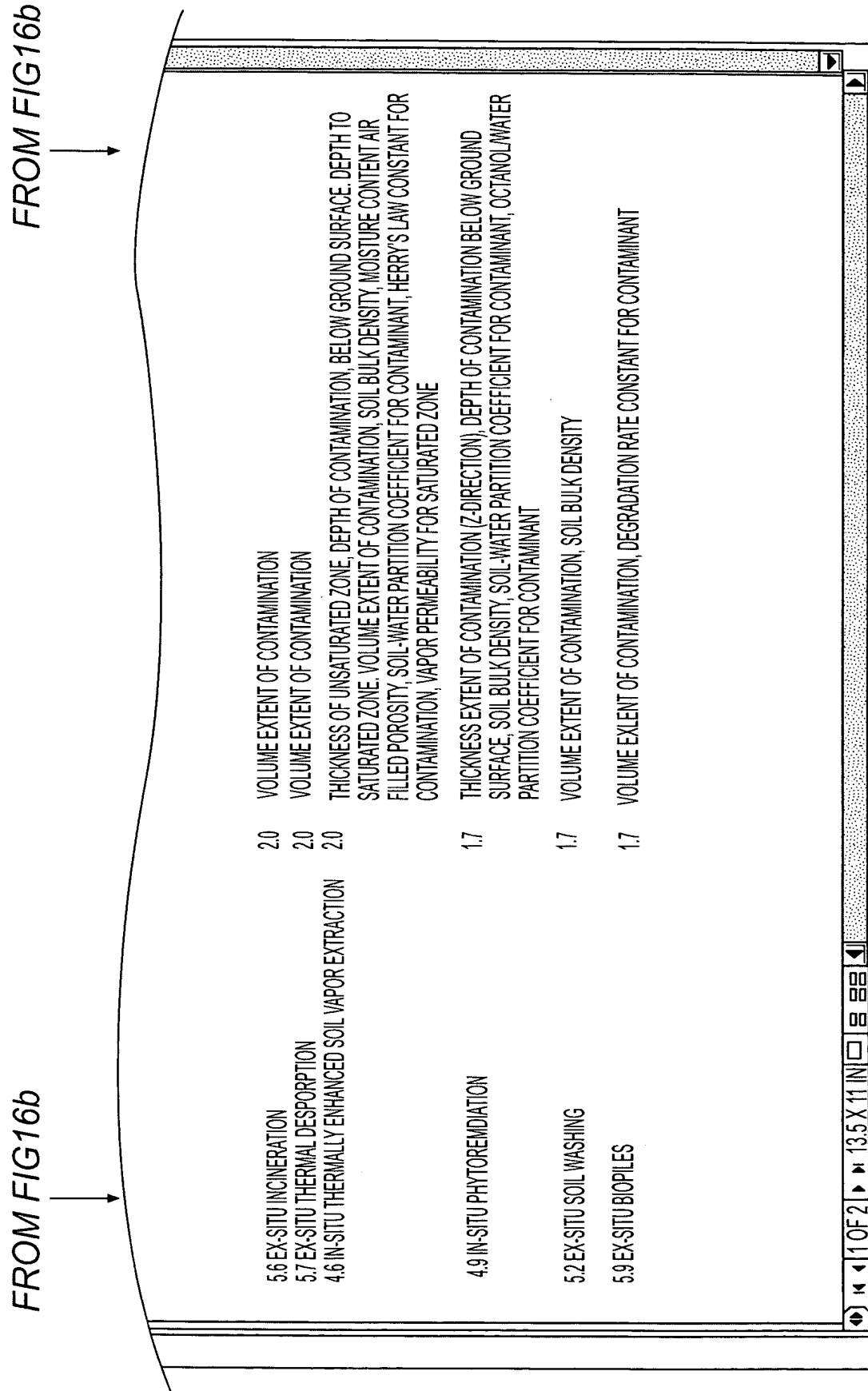
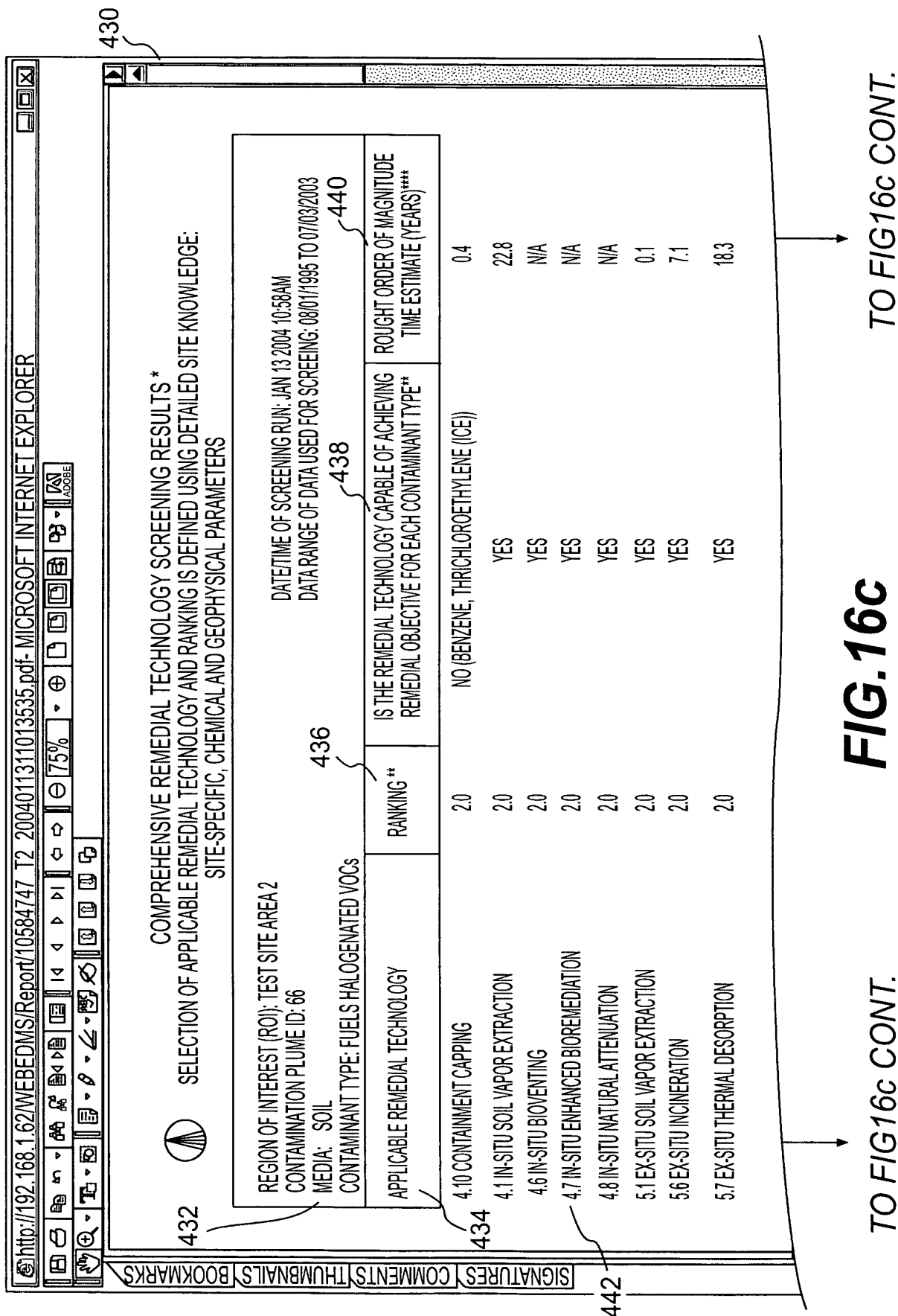


FIG.16b CONT.



FROM FIG16c

FROM FIG16c

4.5 IN-SITU THERMALLY ENHANCED SOIL VAPOR EXTRACTION	1.7	YES	8.6
5.2 EX-SITU SOIL WASHING	1.7	YES	15.7
5.9 EX-SITU BIOPILES	1.7	YES	1.1

\* ALGORITHM IS BASED ON GUIDANCE FROM THE FRTR REMEDIATION TECHNOLOGIES SCREENING MATRIX AND REFERENCE GUIDE, VERSION 44.0 (JAN 2002)

\*\* RANKING RANGE IS FROM 2.0 (MOST APPLICABLE) TO 0.0 (LEAST APPLICABLE)

\*\*\* BASED ON IDEAL EFFICIENCY FACTORS. CHEMICAL FOR WHICH THE REMEDIATION OBJECTIVE IS NOT ACHIEVED ARE LISTED IN PARENTHESIS

\*\*\*\* REMEDIAL TIME ESTIMATES BASED ON EQUATIONS PRESENTED IN PUBLIC DOMAIN LITERATURE (E.G. GWRTAC, USEPA, FRTR, ITRC AND AFCEE)

GWRTAC- GROUND WATER REMEDIATION TECHNOLOGIES ANALYSIS CENTER  
USEPA- UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
FRTR- FEDERAL REMEDIATION TECHNOLOGIES ROUNDTABLE

1 OF 2 13.5 X 11 IN

FIG.16c CONT.

WEBEDMS - MICROSOFT INTERNET EXPLORER
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### COMPREHENSIVE REMEDIAL TECHNOLOGY SCREENING RESULTS

REGION OF INTEREST (ROI):  
TEST SITE AREA 2

TIME INTERVAL:  
FROM 8/1/1985 12:00:00 PM TO 7/3/2003 12:00:00 PM

USERNAME: 452

ROI CREATED DATE:  
JAN 13 2004 10:58 AM

PLUME ID: 66

MEDIA: SOIL

IMPACT AREA: 54173.324 M2

IMPACT VOLUME: 310025.1 M3

CONTAMINANT TYPE: FUELS, HALOGENATED VOCs

APPLICABLE REMEDIAL TECHNOLOGY	RANKING (2-0)	TECHNOLOGY LIMITATIONS	ROUGH ORDER OF MAGNITUDE TIME ESTIMATE (YEARS)	UNIT PRICE	UNIT	COST ESTIMATE (UNIT PRICE * IMPACT VOLUME)
4.10 CONTAINMENT CAPPING	2.0	NO (BENZENE, TRICHLORO ETHYLENE (TCE))	0.4	35.50	M2	\$1,923,153
4.1 IN-SITU SOIL VAPOR EXTRACTION	2.0	YES	22.8		M3	
4.6 IN-SITU BIOVENTING	2.0	YES	N/A		M3	
4.7 IN-SITU ENHANCED BIOREMEDIATION	2.0	YES	N/A		M3	
4.8 IN-SITU NATURAL ATTENUATION	2.0	YES	N/A		M3	
5.1 EX-SITU SOIL VAPOR EXTRACTION	2.0	YES	0.1	150.25	M3	\$46,581,271
5.6 EX-SITU INCINERATION	2.0	YES	7.1		M3	
5.7 EX-SITU THERMAL DESORPTION	2.0	YES	18.3		M3	
4.5 IN-SITU THERMALLY ENHANCED SOIL VAPOR EXTRACTION	1.7	YES	8.6		M3	
5.2 EX-SITU SOIL WASHING	1.7	YES	15.7		M3	
5.9 EX-SITU BIOPILES	1.7	YES	1.1		M3	

FIG. 16d

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WEBEDMS - MICROSOFT INTERNET EXPLORER

REGION OF INTEREST (ROI) INFORMATION	
REGION OF INTEREST (ROI):	TEST SITE AREA 2
TIME INTERVAL:	FROM 8/1/1985 12:00:00 PM TO 7/3/2003 12:00:00 PM
USERNAME:	SQT
ROI CREATED DATE:	JAN 13 2004 10:58 AM
REMARK:	
MEDIA TYPE:	SOIL

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REGION OF INTEREST (ROI) REPORTS
<a href="#">INITIAL SCREENING PDF FILE (NON-NAPL)</a>
<a href="#">INITIAL SCREENING LOG FILE (NON-NAPL)</a>
<a href="#">COMPREHENSIVE SCREENING PDF FILE (NON-NAPL)</a>
<a href="#">COMPREHENSIVE SCREENING LOG FILE (NON-NAPL)</a>

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FIG. 16e

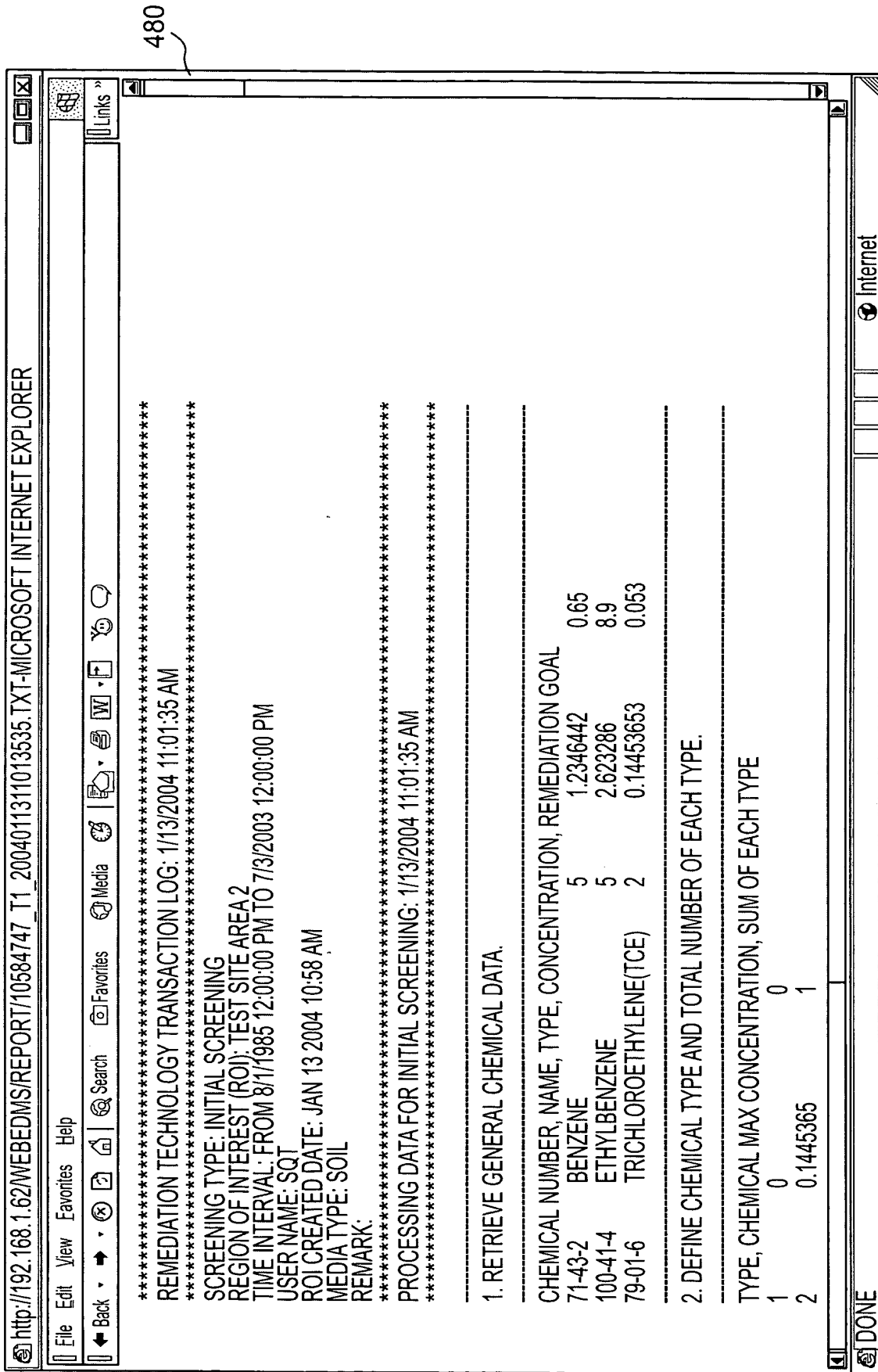
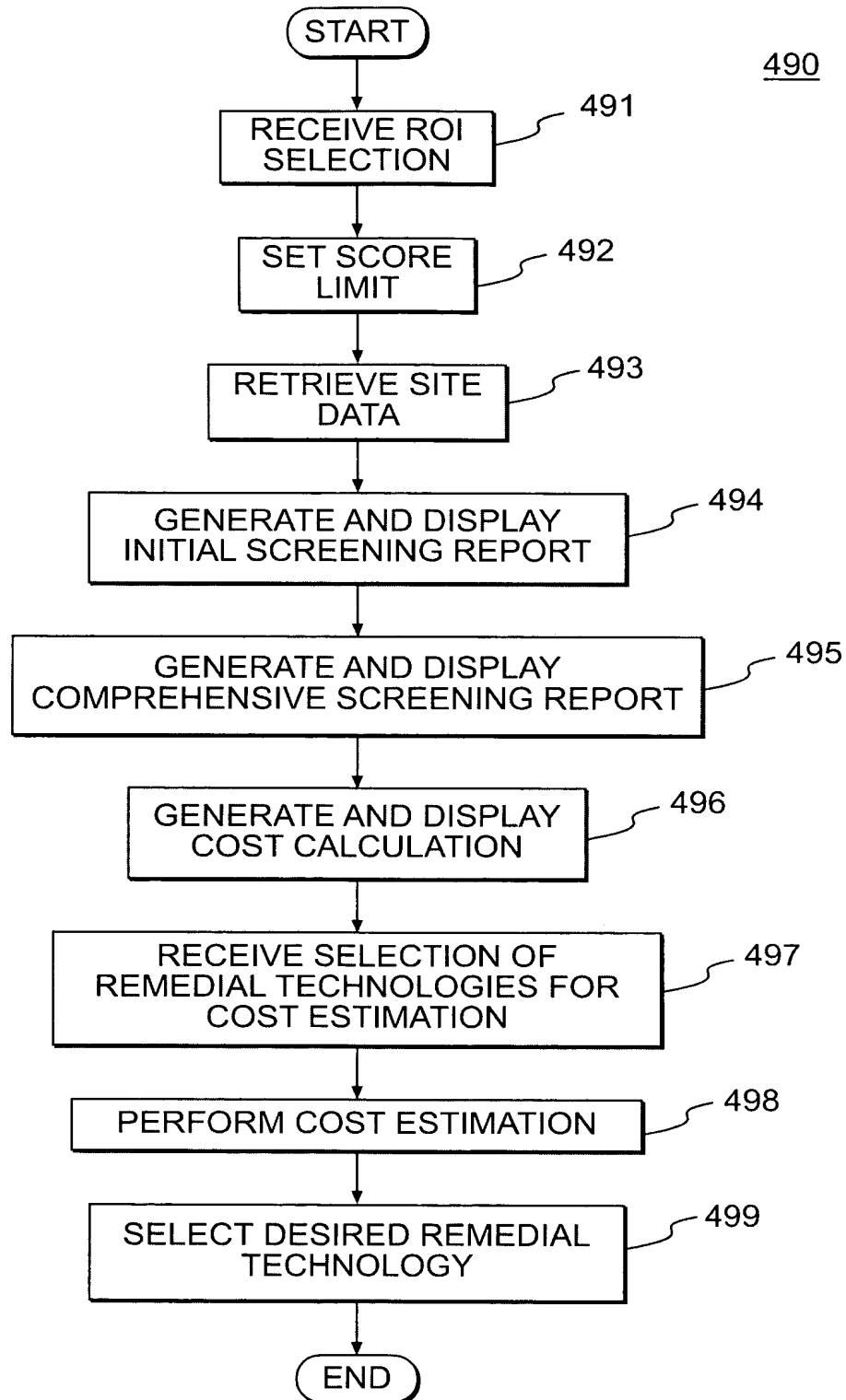


FIG. 16f





**FIG. 17**